VIRGINIA WILDLIFE

OCTOBER 1990 ONE DOLLAR

SPECIAL HUNTER'S GUIDE

Editor's Page

My friend Brenda told me that she was once given a duck. The only thing was, it was a fully-feathered, dead duck. In the spirit of the European-style offering, she let it hang nearly till its skin fell off. Then she snuck out and buried it in the garden. She couldn't bring herself to pluck it.

Now, Brenda can calmly squeeze the life out of a horsefly bigger than your thumb with one bare hand (you've got to squeeze them to death, she says, 'cause slapping just stuns them), but a feathered duck just turns her to mush. Never mind that she's been out on a dove field and even owns a 20-gauge shotgun.

This stuff about killing things is not easy to figure out. Still, there are a lot of people out there who have come to the conclusion that we hunters are terribly evil and misguided murderers. Of course, I have heard some of us call certain animal rights supporters neo-Fascist pigs.

Sometimes I wish I had the kind of single-minded conviction it takes to make such bold accusations. But in this instance, I don't. Instead, like staring at foreigners draped in exotic flowing robes and satin turbans, I am fascinated by these folks whose convictions threaten our hunting tradition. Whence comes their hatred and their rage?

I can only think it must all boil down to perception. Brenda's friend, Susan, for example, is a very practical woman who lives out in the country and raises chickens. Like any good farmer, Susan cuts off the heads of her chickens and boils them for supper, but she can't bear to contemplate a hunter pulling the trigger on one of the deer she surprises while riding her horse on the trails around her home.

On the other hand, Barry Lopez in his wonderful book *Of Wolves and Men*, tells us how some Native Americans believed the consumption of domestic animals poisoned their people. They felt that domestic animals deprived them of the power they gained from consuming a wild animal. In respectfully eating a wild animal, they believed they also acquired the animal's spirit, and thus the animal lived on in them. They do not seem to think much of the value of a domestic animal's spirit.

There is a history, however, of people rejecting the killing of all life. I have read that the ancient religious group in India known as the Jains heroically attempts to repudiate the inseparable link between life and death. They don't kill animals and they wait for plants to die before they will eat them. They have gone so far as to seek out bedbug-infested dwellings at night and make offerings of their bodies to them. They desperately attempt to succor life while killing nothing.

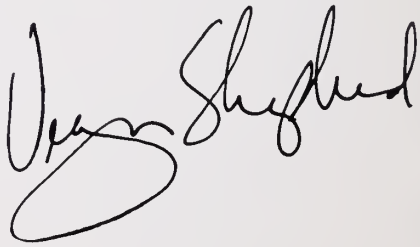
Then again, I do not know of a squirrel hunter on the way to his hunting area who will not swerve to avoid hitting a squirrel on the road. Nor have I ever met a deer hunter who has not simply watched a deer walk past him and never fired . . . just because.

The world is a funny place.

When we were children, my older sister once held a burial for a dear departed goldfish. I had no idea she was so devoted to the fish or I am certain I would have contrived to steal it from her. Nevertheless, she deposited the wet corpse in a shoebox coffin and read appropriate prayers over it in our backyard where she had carefully dug a grave. I peered out of the window, watching the funeral proceed, curious about Sallie's orchestration of such a solemn and lofty ceremony for something I simply would have flushed down the toilet or fed to the cat. Even, Mom, normally counted on to point out the ridiculous in any situation in order to lift the spirits and dismiss any tendency to take life (or yourself) too seriously, respectfully maintained a grevious look throughout the service. I believe I learned a lesson in tolerance that day.

It is good, I think, to feel like burying a feathered duck. It is good to cut off the heads of chickens without remorse. And it is good to mark the passing of a goldfish.

So, indeed, is it good to hunt. There is room here for all.



Volume 51 Number 10

VIRGINIA WILDLIFE

Cover

It's time to check your decoy lines and weights and your waders for holes. The 1990-91 hunting season is off and running—see your 1990 Hunter's Guide beginning on page 11 for details; photo by F. Eugene Hester.

Confidence decoys like this old seagull decoy are being revived in Virginia to enhance decoy rigs—see story starting on page 27; photo by Curtis Badger.

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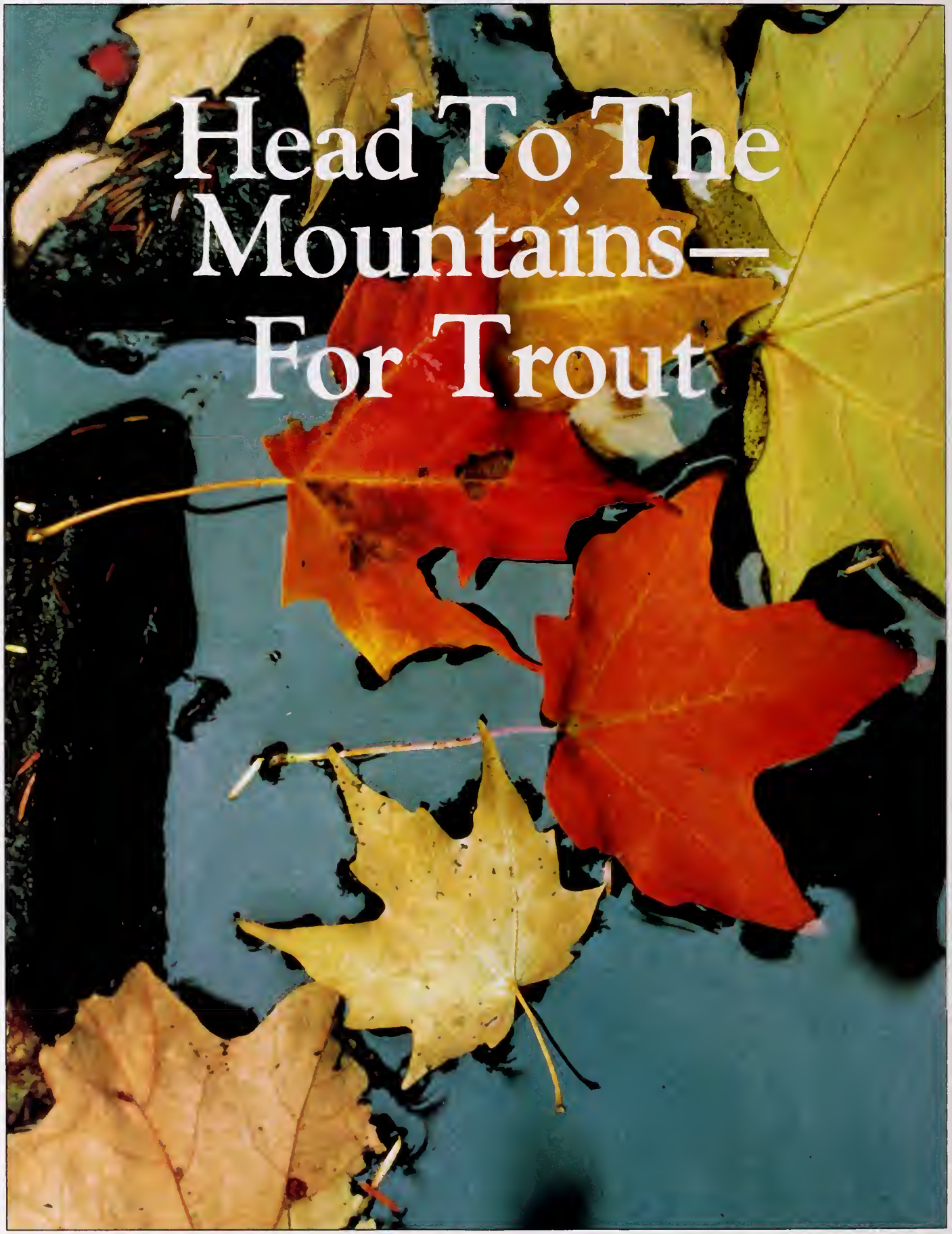


Head To The Mountains— For Trout

photo by Ken Lewis, Jr.

A selection of suitable flies for the fall; photo by Harry Murray.

by Harry Murray

Fall trout fishing can be the best of the entire year; in fact, most serious anglers feel it is by far the most rewarding.

In order to take advantage of this exciting action, however, you must carefully examine what the trout want, need, and yes, even require. By simply surviving the constant onslaught of anglers and the low streams of late summer, the trout making it into fall are wary, savvy opponents. If you doubt this, and insist on them playing by your rules, be prepared to come out on the short end of the contest. If, however, you are willing to carefully investigate the trout's requirements and adjust your tactics accordingly, you will find excellent fishing.

A trout's requirements are fairly straightforward; the fish must have cool, well-oxygenated water with adequate cover. This sounds relatively simple, but considering how warm and how low our streams were in August, you can see that careful consideration must be given to the types of streams that may hold good trout populations. Suitable waters fall into one of two categories: mountain headwater feeder streams, and larger streams with constant spring inputs.

I love to fish the mountain feeder streams in the fall, and although I've been doing it regularly for over 20 years, I must admit that more fish outsmart me than fall to my flies. Since I firmly believe that if my foresight were as good as my hindsight, I'd catch more fish by a darn sight, I'll share some hard-learned lessons with you.

Virginia's fall trout fishing can be the best fishing (and challenge) of the year.

Trout in these small headwater streams are influenced by the same basic rules of survival which guided their existence since springtime—outwitting predators and feeding. Unfortunately for us, their caution level is now whetted to a keen edge, permitting thoughts of food only when it can be gained safely. This means we must use an extremely cautious approach, fine terminal tackle and rods which will let us make very delicate presentations.

To further complicate matters, the majority of the natural food available to the trout in the fall is much smaller than that which they fed on last spring. The large March Brown Mayflies of dogwood time are now only a memory. Even the little yellow Isoperla Stoneflies which lingered so long into the summer have vanished for another year.

The staple diet of the trout in the headwater streams is now comprised mainly of terrestrial insects, with the tiny aquatic Chironomidae Midges thrown in for spice.

Charlie Fox, who was one of the pioneers in the development of terrestrial fly patterns for trout over 50 years ago, told me that his favorite fly on these mountain streams is the Crowe Beetle. There are a broad variety of natural beetles present along our streams in the fall, but the Black

Crowe Beetle in sizes 16 and 18 will match most of them nicely.

One of my favorite tactics is to simply "fish the water" with a size 16 Crowe Beetle on a 6X tippet. Due to the wary nature of the trout, I approach the pools from downstream and carefully identify the various feeding stations throughout the pool. Selecting the closest one first, I cast my Crowe Beetle about two feet above the trout's estimated location so the current will drift it to him naturally—just like a real insect. If I am careful when landing this trout and cautious with my presentation to the next feeding station, I may land several trout in the same pool.

Our mountains are loaded with ants at this time of the year. In fact, I'm confident that trout in our headwater streams eat more ants during the fall than all other insects combined. Certainly the abundance of the ants contributes to this, but beyond that, trout just like to eat ants. Hewett, the angling entomology expert, postulated this was because the formic acid found naturally in the ants produced a sweet taste for the trout. I cannot substantiate this theory, but I've seen trout race four feet across a pool to take a single black ant one quarter of an inch long. This made a lasting impression upon me because I was astounded that the trout could even see that small ant that far away, and given this, how he could justify such a great expenditure of energy for such a small meal.

Anyway, ants are well worth imitating with our flies. My favorite patterns are: Black Fur Ants sizes 16 to 20, Black McMurray Ants sizes 16 to 22, Cinnamon Fur Ants sizes 16 and 18, Cinnamon McMurray Ants sizes 16 to 22.

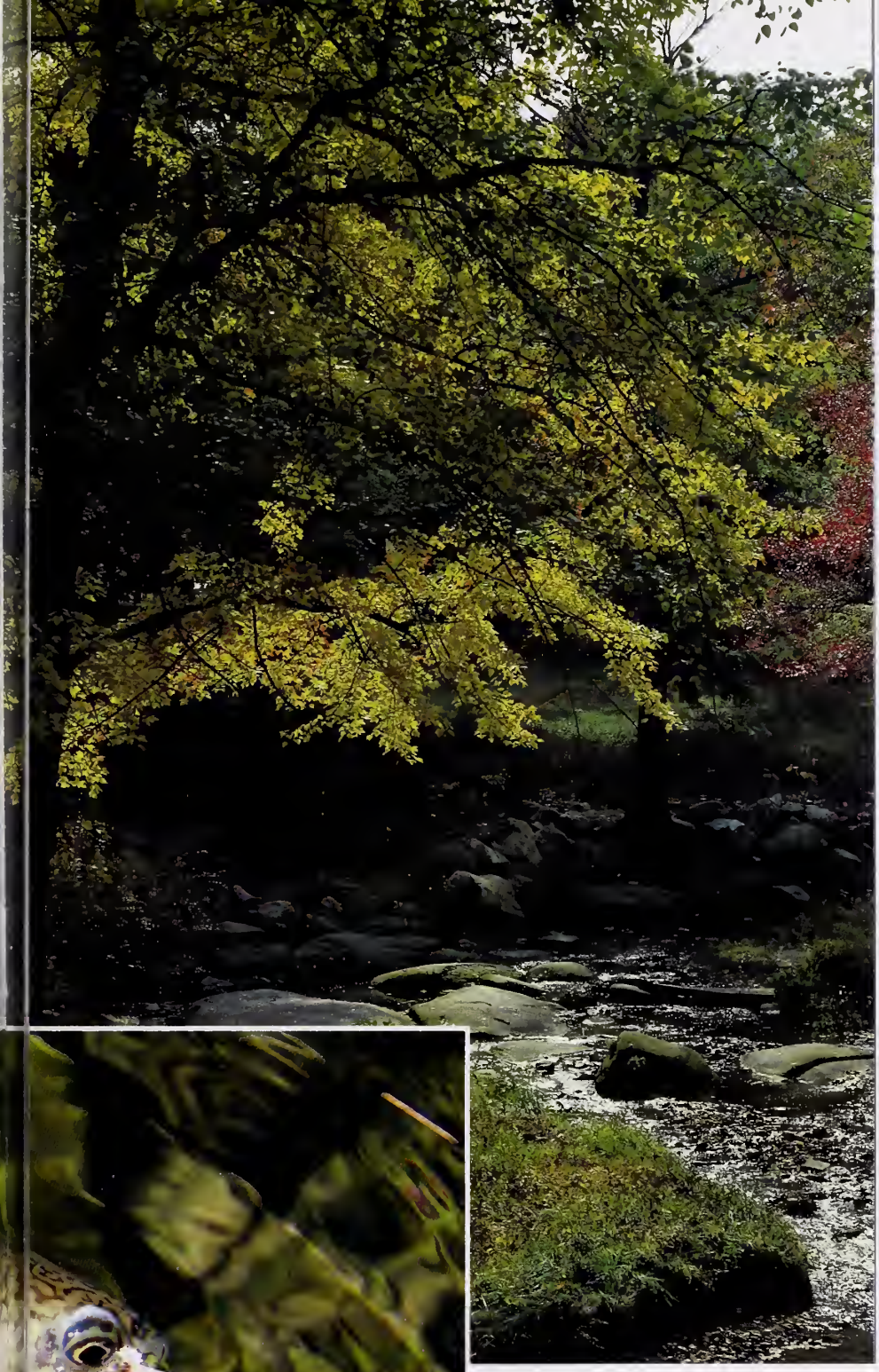
Rather than just fishing the water with Ants like I do with Beetles, I find that I get my best results by pausing for a few minutes before fishing each pool to look for surface feeding trout. Often the abundance of real ants will cause very active feeding, enabling this tactic to be very effective. This ploy certainly sets up one of the most rewarding forms of trout fishing—the one-on-one game.

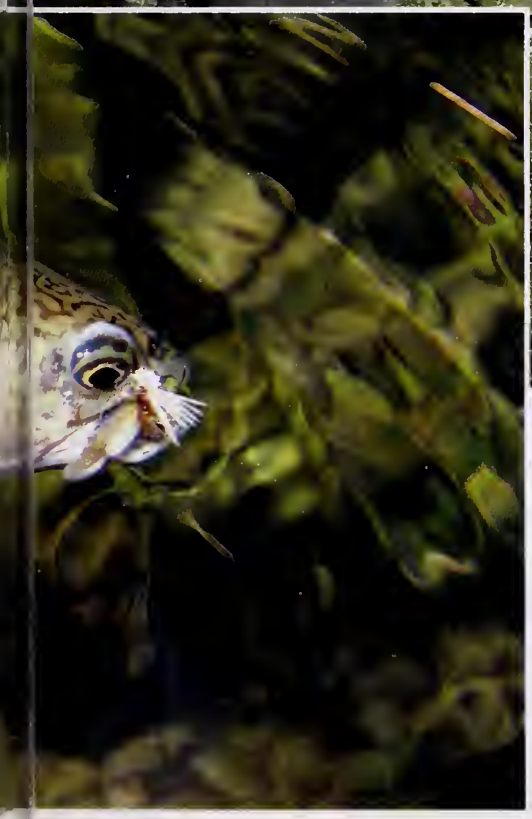
For example, a quick glance about the pool just upstream reveals a delicate rise form beside a large boulder in mid-pool. In the next half minute, that trout sips in three more naturals. You slip quietly into casting position and tensely hold your breath to see if your approach spooked him. Then he rises twice more—your signal to go ahead and make your pitch. Now, it's you against him! Your size 16 Black Fur Ant settles quietly to the stream surface on its 5X leader and drifts naturally over the trout's feeding station. He doesn't even rise to inspect it. Three more drifts yield the same results. Just as you pause, wondering if your presentation scared the trout, he rises to take another natural. He's willing, but he's tough! Tapering your leader down to 6x, you knot on a size 22 Cinnamon McMurray Ant. Out goes the cast; your heart seems to stop momentarily as the tiny ant approaches the feeding station. An almost imperceptible dimple signals the trout's take, so you gently raise your fly rod to set the hook and to simultaneously salute a worthy opponent.

There are circumstances in the fall when I find that I can get away with larger flies in the mountain streams. I strongly suspect this fall will be just such a time. We need Nature's help in two aspects for this tactic to be valid. First, the stream should be a little higher than normal for this time of the year. Secondly, there needs to have been a substantial quantity of sizeable insects for the trout to feed on throughout the summer. Our September rains will take care of the former requirement, and a little worm cursed by everyone but the trout will supply the latter. You know him, he's called the gypsy moth larva.

Although the long-term effect of the gypsy moth on the trout through loss of shade and other factors is not clear, I can assure you that trout feed very heavily upon them. Yes, I know, there are theories that the trout will not eat them because of a bitter taste. Don't you believe it! Either the trout haven't read that chapter of the book or they've found a good chase to nullify the taste, because I've caught hundreds of trout this year so stuffed with gypsy moth worms that I couldn't see why they took my fly.

The real gypsy moth worms are not actually present around our streams in the fall, but the trout





Brook trout are never easy to catch at any time of the year, but the fall requires much more careful attention to lures, presentation and tackle to outwit these summer survivors. ***Left:*** *Wild brook trout; photo by Harry Murray.* ***Above:*** *Photo by Shirley Whitenack.*

apparently have consumed so many throughout the season that they readily accept our flies mimicking this insect.

You can make excellent catches on a dry Gypsy Moth Larva pattern in size 14 fished on a 5X tippet. Since the trout are accustomed to the real worms pelting onto the streams from the trees above, this is the cue for your presentation. Use a little more snap of the rod than normal on the presentation in order to *splat* your fly on the water. This stimulus will often prompt a trout to move across a pool three or four feet to take your fly.

Real gold mines of fishing pleasures for fall trout fishing are the leaf jams which form at the tails of the pools after the leaves are down. These look like miniature dams with a narrow shelf of leaves extending upstream on the surface. These hot spots often produce good trout when no other parts of the pools will. There are good reasons. The leaf dam slows, but does not stop, the stream flow. This permits the current to deliver the natural food to the trout like a slow-motion conveyer belt. Also, the floating leaves in front of the colorful dam provide excellent overhead cover for the trout. They can lie under these leaf shelves with only their noses extending upstream beyond them and safely pick off all the food the current brings them. I often find several of the largest fish in each pool feeding in this manner.

The easiest way to fish the leaf jams is to move in carefully below them and cast a small ant or beetle about five feet above them, letting the current carry the fly naturally to the waiting trout.

There are many mountain headwater streams that supply this type fishing throughout the western part of the Old Dominion. The rule of thumb for this type water is that the further you get back off the beaten path the better the fishing is. Yes, that may mean walking in several miles for good action. Several typical streams would be Laurel Fork west of Monterey in the area downstream from Route 642, and Whitetop Laurel close to Mount Rogers.

The second category of streams which provide good action in the fall are those into which there are good underground spring flows. Typically, these streams are located in the floors of larger valleys, often where there are impressive limestone rock outcroppings. The cool underground water supplies assure comfortable stream temperatures for the trout, while the limestone provides an environment conducive to great aquatic insect populations. In order to differentiate these waters from the freestone mountain feeders, many anglers call them spring creeks.

Many of these streams flow through rich farmlands which are heavily populated with grasshoppers and crickets. These insects last well into the fall and the trout feed exceptionally well upon them.

If you've never seen a large brown trout feeding actively upon grasshoppers on a windy day, you are in for a show the first time you encounter it.

Admittedly, it's hard to believe that the same brown trout which leaves such delicate dimples upon the stream's surface when he gently sips in tiny aquatic insects can be such an exhibitionist when feeding on grasshoppers. But, let's look at why the trout act the way they do under these circumstances and adapt our angling tactics to suit.

When a grasshopper unhappily finds himself upon the stream's surface, he instantly swims toward shore with very forceful strokes from his powerful rear legs. He is not a graceful swimmer, and his splashy system of propulsion drives the trout crazy. Not wanting to miss out on such a big meal, the trout charges the grasshopper, throwing water in every direction as he grabs him. One of the most effective techniques I've found to fish a dry grasshopper fly is to twitch it across the surface in a manner which simulates the movements of the real hoppers. This same method is also productive when fishing dry cricket patterns.

The best flies I've found for this type fishing are Dave's Hopper in sizes 10, 12, and 14, Rod's Tan Hopper in sizes 14 and 16, and Shenk's Cricket in sizes 12, 14, and 16.

To effectively fish for trout in the fall in Virginia, you must first locate cool mountain headwater feeder streams or streams with good underground spring flows. Larger streams will

Unlike the headwater feeder streams, one often encounters good hatches of mayflies on these spring creeks in the fall. The most dependable one is the little blue-winged olive. These delicate little insects provide some of the most exciting fishing of the entire year. I've seen them so concentrated on the stream's surface that many sizeable trout would move out into the shallows to casually sip in the duns. Don't assume this means the trout will be pushovers for your offerings, however.

I once encountered five large trout feeding on these little mayflies in about a 60-yard stretch of one of these spring creeks. Embarrassingly, I must admit that I spooked all of them before I could get close enough to make a cast—and I was on my hands and knees. Tough trout!

The best flies I've found for this

have warmed up too much in the summer to hold over trout; photo by Soc Clay.

blue-winged olive hatch are the Beatis Parachute size 18 and Harrop's Gray Olive No Hackle Dun size 20. Needless to say, these should be fished on a 6x tippet.

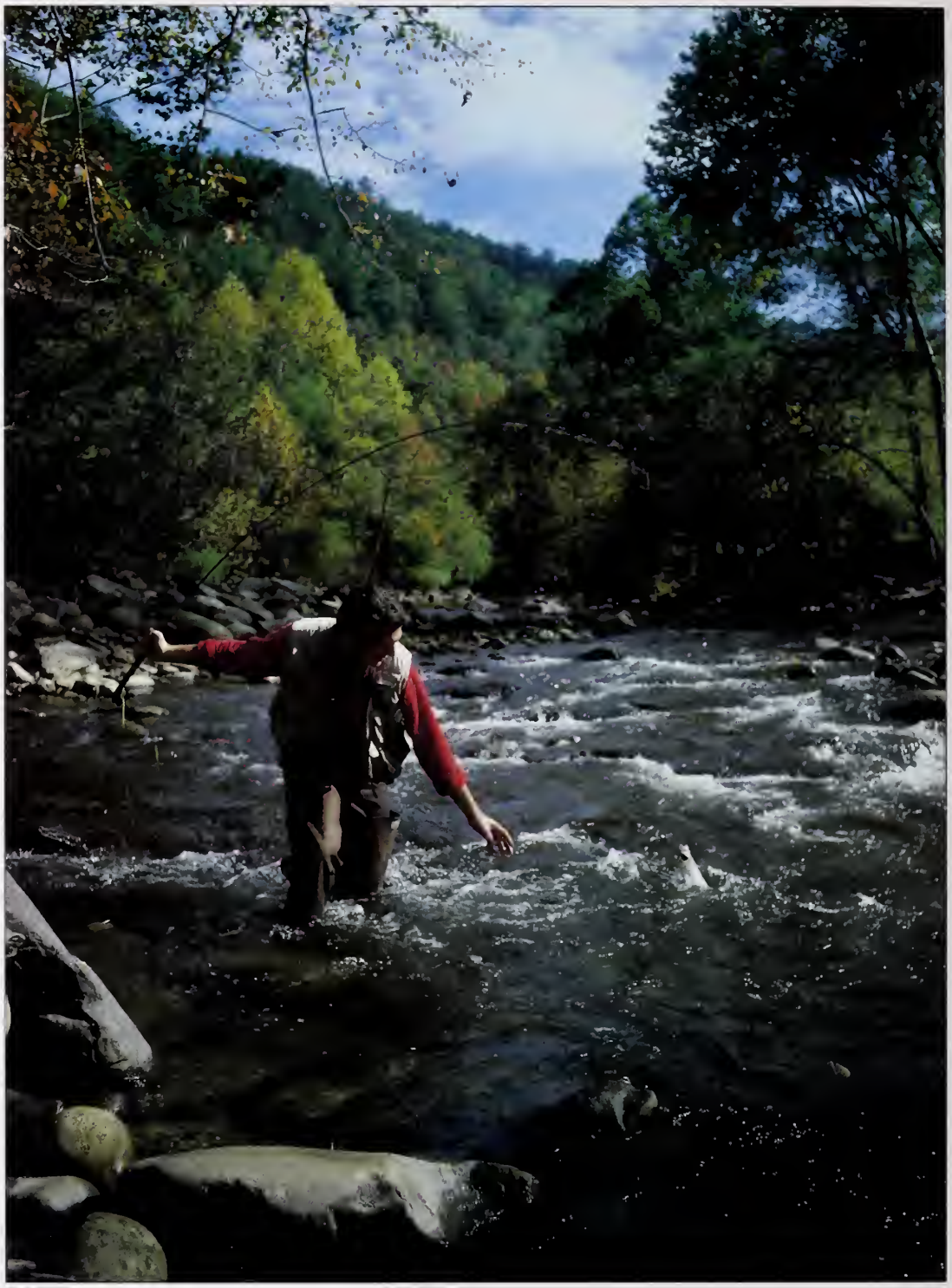
Another aquatic insect that puts in an appearance on our spring creeks in the fall is the chironomid midge. These miniature flies which look much like mosquitoes are found in a broad variety of colors, but olive and grayish black predominate. What they lack in size they more than make up for in numbers. It is not at all unusual to see clouds of them over the stream. Although you might suspect delicate rise forms when the trout are feeding on Chironomidae, this is often not the case. The trout's splashy table manners result from the fact that they feed heavily on the emerging pupa just below the surface. But, not to worry. Most of these trout will take a well-presented size 20 Griffith Gnat or a size 24 Gray Olive No Hackle dry on a 7X tippet.

Numerous trout streams throughout the Old Dominion fall into this category. To help identify them, you should be on the lookout for springs entering small to medium-sized established streams. Seldom will a large stream provide what you want, since these have too much warm water for the springs to negate. The spring sources may be in the form of one or two very large springs, or they may be a series of dozens of smaller seepages. Whichever form these springs take, you will be able to identify them by the rich, dark-green aquatic weed growth around them. Often this will be watercress, but other vegetation may be present.

Several good examples of these type trout streams are Pads Creek below Bubbling Spring west of Rockbridge Alum Spring in Bath County, Mill Creek on the Bath/Rockbridge County line west of the town of Goshen, and Back Creek along Route 600 north of Mountain Grove in Bath County.

As you can imagine, the tackle demands for efficient fall trout fishing are quite critical. Since delicacy and accuracy are imperative in small mountain feeders, I have gone exclusively to two-weight fly rods at this time of the year. Although I have several rods which fall into this category, my favorite one is eight feet long and weighs two ounces. This slightly extra length enables me to control the fly line on the water without approaching the pools so closely that I scare the trout.

The requirements for fly rods for spring creeks during the fall are even more critical than for the feeder streams. As mentioned earlier, you may be fishing a size 10 Dave's Grasshopper on a 4X tippet one minute, and switch to a size 24 No Hackle dry fly on 7X tippet the next minute. To further complicate this, you often find yourself in low flat pools which require long casts. I find that a very delicately tipped nine-foot fly rod which balances with a four-weight line is ideal for fall spring creek fishing. Yes, it's tough. And, if you are over-gunned in tackle, the trout will



Much more caution must be taken in fishing for trout in the fall. The dry flies used are miniscule, the tackle ultra-light, and the presentation carefully planned. But the rewards are great; photo by Soc Clay.

probably completely ignore your flies.

Fly reels for fall trout fishing should be light enough to balance properly with the light fly rods. The starting drags of these reels must have the capacity for *very* light settings; this prevents breaking the trout off on a run as he takes the first few inches of line from the reel.

Leaders should be from seven and a half feet to nine feet long and tapered down to 4X, 5X, 6X and 7X. Most experienced fall anglers prefer double tapered two-weight floating lines for the feeder streams and either weight forward or double tapered four-weight fly lines for spring creeks.

By properly evaluating our trout streams, determining the specific foods upon which the trout feed under various conditions, and carefully adapting your tactics to meet these demands, I think you will agree that fall trout fishing is the most rewarding of the whole year. Fished out? Don't you believe it! □

Harry Murray is a frequent contributor and among other pursuits, he teaches fishing and fly tying in Edinburg, Virginia.

1990
Virginia Hunter's Guide

Staff photo

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Wild turkey gobbler; photo by Leonard Lee Rue III.

Hunting Season Outlook 1990-1991

by Bob Duncan, Chief Wildlife Division

1989-90 Deer Season Summary

In spite of some poor hunting weather at times during the 1989-90 season, Virginia deer hunters established a record harvest of 135,094 deer statewide. An additional 20,532 deer were taken over the 1988 season for an increase of nearly 18 percent across the state. The previous record was 121,801, set in 1986.

Hunters on both sides of the Blue Ridge Mountains contributed to the statewide record by establishing new harvest benchmarks for both the east and the west. Hunters west of the Blue Ridge accounted for 53,889 deer (up 17.7 percent) and eastern hunters took 81,205 animals (up 18.1 percent.)

More liberal bag limits and additional "doe days" provided Virginia deer hunters with the opportunity to harvest a record number of whitetails in the Old Dominon. The increase was statewide and all groups of deer hunters (bowhunters, muzzleloaders, etc.) established new records. Bowhunters increased their totals by 14 percent over the previous year with a take of 10,179. Black powder enthusiasts availed themselves of the more liberal number of either-sex deer hunting days (six) and finished the season with a harvest of 3,040 deer of which 59 percent were female.

1990-91 Deer Season Forecast

Deer hunting regulations will remain unchanged from the 1989 season with the exception of the addition of an early muzzleloader deer season. The 1990 General Assembly created a new special muzzleloader license with a bonus deer tag, and game regulations were amended to add an early week of blackpowder gun hunting in most counties statewide. The existing late special blackpowder season west of the Blue Ridge remains unchanged except for the new license requirement and the extra deer tag issued with the special license.

The 1990 early special muzzleloading season will be November 12-17 which is the week between the close of the early bow season and the beginning of the general firearms deer season. The early special muzzleloading season applies to all counties where deer hunting with a rifle or

muzzleloading gun is permitted, *except* in the cities of Chesapeake, Suffolk (east of the Dismal Swamp Line), and in Virginia Beach and in the counties of Lee, Russell, Scott, Tazewell, Washington and Wise.

Increasing deer herds statewide, liberal season and bag limits, and the new muzzleloading season and bonus tag will likely result in another record harvest for the 1990 season. With favorable hunting conditions, the deer harvest could easily approach the 150,000 mark statewide.

Black Bear

Virginia had a record harvest of black bear again in 1989 with a total of 621 being checked, according to Research Biologist Dennis Martin. This has followed five previous consecutive record harvests in 1988 (579), 1987 (557), 1986 (539), 1985 (472) and 1984 (467). Rockingham County provided 79 harvested bear which is also a record county kill, followed by Augusta (55), Page (52), Rappahannock (47) and Albemarle (44). The percent females in the harvest increased slightly to less than 40 percent, but was well within acceptable historical and biological limits.

Since a 1988 legislative act permitted regulation changes in nine southwest counties, 107 bear have been relocated into the portions of those counties closed to bear hunting. Although bear are not hunted in the released areas, it is felt that the long-term benefits will be an abundant bear resource for both hunters and others that appreciate this fine animal.

The 1990-91 bear hunting season looks bright. Weather, food supplies, age of the young segment of the population and number of hunters affect the harvest. With acceptable amounts of these ingredients, another harvest of more than 600, or possibly another record harvest, should be expected.

Wild Turkey

The wild turkey is Virginia's most popular game bird in terms of hunter numbers and effort. Populations of wild turkey are increasing throughout most of Virginia and last year's combined harvest of 21,493 in the fall and spring was the second highest on record.

Fall Turkey Season

Early indications suggest fall turkey hunters can expect good turkey populations. The indicators biologists use to assess turkey population status are: (1) estimates of the breeding population and (2) recruitment or reproductive success. The spring gobbler harvest is perhaps the best index available for biologists to monitor breeding populations. The spring 1990 record gobbler harvest of 7,750 suggests that our spring population was good.

Recruitment, or reproductive succes, ranges widely between years depending on a number of variables. Brood observations this summer indicated that turkey production was fair this spring.

As of June, VDGIF field staff are reporting a good number of broods throughout the state. Bill Keffer (Blacksburg Ranger District) and Mark Frank (Fairystone WMA) are leading the reported observations with sightings of 5 broods each during June. Joey Robertson (White Oak Mountain WMA) reports the highest count of 31 turkeys in a multiple brood sighting.

Based on the knowledge that breeding populations were good this spring and recruitment was average, hunters can expect average to above average turkey populations this fall. Hunters should keep in mind, however, that mast availability in the fall has a significant impact on the wild turkey's range. During years of mast failure, birds typically range further in search of food. Scratching is often more pronounced and birds are typically easier to locate when mast is less common. When mast is abundant, turkeys frequently travel less and leave less sign, making it harder for hunters to locate them.

Spring

Most of the spring gobbling activity and harvest can be attributed to adult toms, 2 years of age and older. Reproduction, therefore, 2 years prior to any given spring gobbler season has a significant bearing on season success. Turkey reproductive success in 1989 was fairly good and should provide above average gobbler populations during the 1991 spring season. A successful spring season is also dependent on favorable weather conditions. Although toms will continue to gobble during inclement weather conditions, it is thought that they gobble less frequently and are certainly more difficult to hear and locate.

Withstanding poor weather, we believe spring gobbler hunters can expect another excellent season. Good hunting opportunities for spring gobblers can be found across the state, with the highest populations of birds being found in the Northern Neck and southwest mountain areas. Turkey populations throughout the state are believed to be below carrying capacities of the land and the prospect for continued growth of populations and harvests is excellent.

Ruffed Grouse

Grouse hunters have for the last two years experienced below average hunting success in Virginia. Avid grouse hunters and biologists who study grouse populations are aware, however, that grouse populations tend to be cyclic. In the northern part of its range this cycle is highly pronounced with population highs and lows coming every 8-12 years. Grouse populations in the Southeast states, including Virginia, are less predictable but nevertheless show fluctuation patterns.

The forecast for grouse populations and grouse hunters is one of cautious optimism as we may be coming out of low ebbs of populations fluctuations. This optimism is guided by the trend in population numbers, by winter food availability, and weather during the brood season. Throughout much of Virginia's grouse range, acorn production was good to excellent last year. Research has shown that when acorns are available grouse are able to gain weight rapidly and lay down fat reserves which contribute to survival and reproductive success. The second important factor in grouse population dynamics is the annual recruitment or reproductive success of hens. Grouse reproductive success can be highly variable, with predation and weather influences exacting the greatest effects. Weather, in general, in Virginia grouse woods has been mild in the spring of 1990, and reports of grouse brood sightings are up. Joe Huffer, Wildlife Biologist Assistant in the Dry River Ranger District has, for example, reported four grouse broods in June in Augusta and Rockingham Counties.

The Department is interested in recruiting avid grouse hunters for the Department's grouse survey. If you are interested, please contact Gary Norman, VDGIF, Route 1, Box 243 A, Mt. Sidney, VA 24467.

Ruffed grouse; photo by Leonard Lee Rue III.

Bobwhite Quail

Sportsmen across the state enjoyed improved quail hunting success during the 1989-90 season. According to Wildlife Research Biologist Mike Fies, quail hunters bagged an average of 0.40 quail per hour (up 38 percent from 1988-89) and flushed an average of 0.28 coveys per hour (up 27 percent). The piedmont region experienced the greatest increase in hunter success, with the tidewater area also showing a distinct increase in the numbers of quail bagged and coveys flushed. Excellent nesting conditions and brood rearing success in these areas are believed to have been the major factors responsible for improved hunter success.

Quail hunting prospects for the 1990-91 season look even better. Carryover appears to have been excellent, as evidenced by high numbers of quail heard calling this spring. So far, adequate rainfall has produced better than average nesting conditions, and should have had a beneficial effect on insect numbers and seed production. If drought conditions occur in mid to late summer, however, late-nesting quail could be affected. The tidewater region should be the most productive quail hunting area again this year with the piedmont and northern Virginia areas also providing very good quail hunting opportunities. Quail hunters in the western mountains will continue to have to search diligently to locate coveys.

Squirrels

A "bumper crop" of squirrels is expected to be available for small game hunters this fall. Acorn production was excellent during the previous two seasons, and squirrel populations are recovering quickly from the low numbers caused by food shortages three years ago. Rural mail carrier observations statewide were up last year by 38 percent indicating a significant increase in squirrel populations. Even high populations are expected this year. Mild temperatures and minimal snowfall accumulations during most of the winter, especially in the western mountains, made acorns readily available into the spring months. Adult squirrels entered the breeding season in excellent physical condition and should have produced a high number of young squirrels.

Gray squirrel; photo by Leonard Lee Rue III.

Wildlife Research Biologist Mike Fies reports squirrel hunters in Northern Virginia and in the central mountains should experience the best squirrel hunting, with good numbers of squirrels also found in the eastern piedmont and tidewater areas. Hunters in the southwest mountains and western piedmont may have to scout harder for good areas to hunt, but populations should still be good. Sportsmen who hunt during the early squirrel seasons will be most successful in areas where hickory nuts are available. Fox squirrel populations are highest in Augusta, Bath, Highland, and Rockingham counties, with moderate populations also occurring in Bland, Russell, Smyth, Tazewell and Washington counties.

Mourning Dove

The historical opening of mourning dove season on Labor Day weekend signals the beginning of a new hunting season for many Virginia hunters. An estimated 60,000 dove hunters annually spend about 260,000 days afield in pursuit of these speedy game birds. The mourning dove is in fact our nation's most popular game bird in terms of hunter numbers and harvest. The highly adaptable dove can be found across the country in a wide range of habitats and conditions. In Virginia the greatest populations of mourning doves can be found in agricultural areas where these seed eating birds thrive. Hunting opportunities are often best in agricultural areas following harvesting operations.

Results of the annual mourning dove survey conducted by the USF&WS indicate that the mourning dove population in the Eastern Management Unit, which includes Virginia, is in good condition with no significant changes in population status. Dove hunters in the Old Dominion, therefore, can expect dove hunting to be similar to last year.

Rabbits

Small game hunters throughout Virginia should find excellent populations of rabbits this season. Rabbit hunter success was noticeably improved in most areas last year, and all indications are for an even better season this year. A mild winter followed by adequate spring rains have produced very favorable conditions for rabbit production. Many young rabbits are being observed in almost all regions. Rabbit populations, however, are localized and hunters will still have to find areas with good cover to experience success.

According to Wildlife Research Biologist Mike Fies, the southwest mountain region was the most productive rabbit area last year, based on the number of rabbits observed by rural mail carriers. Statewide, the numbers of rabbits observed increased 74 percent over the previous year. Rabbit hunters should find similarly improved conditions during the 1990-91 hunting season in most areas, with all regions experiencing success at least as good as last year.

Woodcock

The prospects for hunting woodcock in Virginia this fall are better than last year based on population data collected this spring. First, the 1990 spring breeding population index showed no significant difference in population levels between 1989 and 1990. Secondly, reproduction this spring in Maine and some of the Eastern Canadian provinces (the woodcocks primary breeding grounds) appears normal according to Greg Sepic, Woodcock Research Biologist at Moosehorn National Wildlife Refuge, Maine. Greg feels, however, that even with this year's good reproduction, it may take the Eastern Management Unit some time to recover from last year's poor recruitment. As always, hunters should watch for cold fronts in the north to move woodcock "flights" through the state. Woodcock splashings and pencil-size probe holes are signs of woodcock migrations.

The Department has selected a split season framework for the woodcock hunting season this fall to optimize hunting opportunities across the state. The early season is set to coincide with historical trends of migration patterns in the western and piedmont regions. Woodcock migration in the tidewater region occurs throughout the season but typically peaks later than other areas. Our late season is set to provide hunting opportunities for these late season migrants.

Waterfowl

Based on habitat and breeding waterfowl surveys, it is felt that duck fall flights in 1990 will be approximately the same or slightly above the 1989 level. May pond counts in the Canadian prairie region of southern Alberta, Saskatchewan and Manitoba were up 66 percent over last year; however, the north central prairie areas of the U.S. (eastern Montana, North Dakota and South Dakota) were 46 percent below last year.

The total number of breeding ducks was up approximately 1 percent over last year, essentially no change. Breeding mallards and redheads were 4 percent below last year's survey; and blue-winged teal were at a record low 11 percent below 1989.

A number of prairie nesting duck species were noted above last year's breeding populations: gadwall up 23 percent, American wigeon up 3 percent, green-winged teal up 12 percent, northern shoveler up 16 percent, pintail up 15 percent and canvasback up 22 percent.

Late winter, spring and early summer water conditions in Virginia were good, generally. Favorable wood duck brood habitat was plentiful and wood duck production was observed to be good statewide. □

Statewide Deer, Bear, and Fall Turkey Harvest

County	1987 — 1988			1988 — 1989			1989 — 1990		
	Deer	Bear	Turkey	Deer	Bear	Turkey	Deer	Bear	Turkey
Accomack	661	0	7	603	0	0	636	0	24
Albemarle	2,059	39	359	1,598	47	172	2,517	44	230
Alleghany	1,697	24	318	1,225	21	229	1,993	23	184
Amelia	1,858	0	302	1,333	0	161	1,712	0	279
Amherst	1,599	9	388	1,334	15	177	1,692	22	302
Appomattox	864	0	318	690	0	156	753	0	248
Augusta	2,658	48	218	3,285	37	153	3,454	55	211
Bath	3,219	25	339	3,377	19	284	4,106	14	308
Bedford	3,650	10	566	3,020	15	307	3,724	17	429
Bland	1,541	19	260	1,903	3	328	2,022	3	315
Botetourt	2,474	19	478	2,554	48	284	3,464	28	466
Brunswick	1,704	0	263	1,510	0	73	1,632	0	211
Buchanan	17	1	3	0	0	0	28	0	1
Buckingham	2,060	0	471	1,554	0	334	2,055	0	359
Campbell	568	0	266	447	0	118	667	0	209
Caroline	1,670	0	396	1,410	0	281	1,548	0	350
Carroll	763	0	295	836	0	324	913	0	451
Charles City	924	0	41	850	0	20	855	0	31
Charlotte	1,088	0	260	973	0	136	1,157	0	180
Chesapeake	394	5	0	272	10	0	372	0	0
Chesterfield	665	0	83	609	0	17	794	0	67
Clarke	662	0	52	741	0	22	1,065	0	21
Craig	2,180	14	196	2,268	22	174	3,192	19	263
Culpeper	930	0	160	933	0	104	899	0	95
Cumberland	1,887	0	345	1,392	0	232	1,740	0	352
Dickenson	27	0	3	0	0	0	5	0	2
Dinwiddie	1,190	0	248	872	0	166	1,263	0	227
Essex	389	0	96	413	0	90	489	0	85
Fairfax	218	0	4	223	0	1	383	0	0
Fauquier	1,973	0	157	2,226	0	99	2,702	0	80
Floyd	785	0	180	830	0	161	1,019	0	262
Fluvanna	1,339	0	303	1,071	0	176	1,445	0	224
Franklin	1,375	0	428	1,377	0	311	1,891	0	386
Frederick	1,800	0	367	2,055	0	220	2,665	0	85
Giles	2,026	25	388	1,931	9	285	2,122	10	353
Gloucester	370	0	11	406	0	0	410	0	30
Goochland	1,049	0	218	827	0	113	902	0	192
Grayson	2,769	0	199	3,139	0	313	3,321	0	307
Greene	199	17	45	145	24	16	205	20	29
Greensville	1,202	0	24	1,118	0	27	1,134	0	24
Halifax	1,511	0	441	1,295	0	266	1,376	0	349
Hampton-Newport News (city)	252	0	3	199	0	0	243	0	9
Hanover	507	0	162	551	0	93	544	0	186
Henrico	592	0	24	407	0	12	523	0	21
Henry	684	0	56	705	0	40	1,076	0	93
Highland	2,492	14	211	2,544	17	150	3,157	21	151
Isle of Wight	1,520	1	7	1,791	0	0	1,723	0	7
James City	648	0	4	401	0	0	577	0	6
King & Queen	902	0	209	871	0	196	998	0	241
King George	1,016	0	47	968	0	11	1,004	0	13
King William	827	0	149	802	0	142	904	0	228
Lancaster	557	0	3	545	0	2	488	0	12
Lee	308	0	132	398	0	102	440	0	100
Loudoun	2,378	0	92	2,607	0	25	3,371	0	47
Louisa	1,048	0	299	668	0	140	915	0	207
Lunenburg	1,015	0	150	863	0	106	1,074	0	116
Madison	433	34	92	401	48	49	533	38	77
Mathews	130	0	6	129	0	0	95	0	0
Mecklenburg	912	0	32	861	0	13	1,032	0	87
Middlesex	114	0	13	116	0	15	289	0	28
Montgomery	1,091	9	202	1,250	0	173	1,437	5	214
Nelson	1,087	10	281	812	39	103	1,144	36	193
New Kent	1,025	0	84	904	0	37	856	0	60
Northampton	323	0	1	310	0	0	488	0	1
Northumberland	551	0	10	534	0	6	587	0	20
Nottoway	1,126	0	153	1,063	0	96	1,257	0	177
Orange	748	0	137	630	0	63	759	0	96
Page	980	34	104	934	47	48	1,015	52	21
Patrick	920	0	143	840	0	116	1,227	0	159
Pittsylvania	2,921	0	468	2,671	0	209	3,416	0	363
Powhatan	1,927	0	222	1,587	0	126	1,841	0	188
Prince Edward	1,779	0	331	1,333	0	149	1,729	0	274
Prince George	1,442	0	119	1,209	0	82	1,350	0	41
Prince William	936	0	111	480	0	35	799	0	30
Pulaski	1,031	2	159	1,036	1	133	1,205	0	202
Rappahannock	1,661	28	98	1,667	31	58	1,756	47	43
Richmond	735	0	39	652	0	7	672	0	25
Roanoke	406	6	80	415	6	45	356	9	71
Rockbridge	2,200	16	311	2,349	24	206	2,809	32	244
Rockingham	2,959	73	166	3,342	36	126	3,276	79	80
Russell	154	2	48	184	2	39	283	2	58
Scott	429	0	182	559	0	153	634	0	141
Shenandoah	2,624	24	293	3,088	23	209	3,058	16	124
Smyth	1,137	0	136	1,400	1	214	1,565	1	184
Southampton	4,627	0	3	4,978	0	0	4,363	0	10
Spotsylvania	622	0	136	229	0	71	469	0	84
Stafford	784	0	142	674	0	58	752	0	96
Suffolk	1,293	7	4	1,189	15	0	1,013	0	4
Surry	1,643	0	50	1,872	0	25	1,981	0	13
Sussex	2,109	0	93	2,149	0	47	2,677	0	77
Tazewell	383	16	111	554	5	99	624	5	107
Virginia Beach	293	0	0	307	0	0	261	0	0
Warren	1,280	24	102	1,234	8	61	1,898	22	54
Washington	397	0	78	459	1	67	600	1	78
Westmoreland	622	0	62	686	0	17	699	0	36
Wise	273	0	135	307	0	102	365	0	73
Wythe	1,604	2	166	1,592	4	214	1,798	0	239
York	838	0	10	611	0	3	767	0	13
Totals	119,309	557	16,157	114,562	579	10,623	135,094	621	13,743

Licenses Required

If you hunt, you must have a valid license. Exceptions to this are: (1) Landowners and tenants who live on the land they rent and who have their landlord's *written permission*; (2) Virginia residents 65 years of age or older who hunt on private property in the county of their residence.

What licenses you may need depends upon what, where and even how you hunt. A *basic* resident or non-resident license is required of all hunters and is valid for hunting all upland game. If you want to hunt deer, bear and turkey, an *additional* license is required. A National Forest permit (stamp) is needed to hunt on National Forest land and a similar stamp is required to hunt the Piedmont State Forests. A special archery license is required to hunt during special seasons open for bowhunting only. Some western counties require a game damage stamp to hunt deer or bear within their respective boundaries. These are issued by the clerks of the court in counties where they are required. A federal migratory waterfowl stamp is required for ducks or geese and is available at local post offices. A voluntary state waterfowl stamp is also available for $5, the proceeds from which will be used for habitat acquisition and restoration, and waterfowl research. A blind license must be displayed on both stationary and floating blinds in, or on the shores, of public waters east of Interstate 95 except in the Eastern Shore counties. Consult the Game Law Summary for particular information.

A license year is from July 1-June 30. Licenses may be obtained from the clerks of most courts and from authorized Department agents conveniently located throughout the state. Requirement clarification may be obtained from the Virginia Department of Game and Inland Fisheries, Box 11104, Richmond, VA 23230-1104. Phone (804) 367-1000, or the toll free number 1-800-252-7717.

White-tailed deer; photo by Irene Vandermolen.

Special Muzzleloading License

The 1990 Virginia General Assembly passed legislation (HB537) establishing a new special muzzleloading license which reads: "There shall be a license for hunting with a muzzleloader during the special muzzleloading seasons, which shall be in addition to the license required to hunt small game."

The Virginia Department of Game and Inland Fisheries amended the game regulations to add an early week of muzzleloading gun hunting in most counties statewide (with exceptions). The existing late muzzleloading season west of the Blue Ridge and in certain counties east of the Blue Ridge remained unchanged except for the new special muzzleloading license requirement and the extra deer tag issued with this license.

Questions and Answers Concerning the New Special Muzzleloading Gun License:

1. What licenses must I have to hunt with a muzzleloading gun during the special muzzleloading gun seasons?

You must have the basic hunting license ($12.00) resident or ($60.00) nonresident and the special muzzleloading gun license ($12.00) resident or ($25.00) nonresident to hunt with a muzzleloading gun during the special muzzleloading seasons.

2. When and where can I use the special muzzleloader gun license?

The early special muzzleloading season begins on the second Monday in November, for a total of six consecutive hunting days, in all counties where deer hunting with a rifle or muzzleloading gun is permitted, except in the cities of Chesapeake, Suffolk (east of the Dismal Swamp Line), and in Virginia Beach and in the counties of Lee, Russell, Scott, Tazewell, Washington and Wise.

The late muzzleloading season for those counties west of the Blue Ridge and certain counties east of the Blue Ridge remains unchanged. This traditional late season runs from the third Monday in December and ends on the first Saturday in January. See the Game Law Summary for additional details.

3. Does the special muzzleloading license entitle me to any more deer?

Yes. A bonus deer tag is issued with the special muzzleloading gun license which is in addition to the regular seasonal bag limit.

4. Which deer tags may be used during the early and late segments of the special muzzleloading seasons?

Only the deer tag from the special muzzleloader gun license is valid for use during the early muzzleloader segment. However, deer tags from both the muzzleloader license and from the big game license may be used during the late muzzleloading season. Archery license tags are not valid for use during the special muzzleloading gun season.

5. Can I use the deer tag from my muzzleloading license during the general firearms deer season?

No, the tag issued with the muzzleloading license may only be used during the early and late segments of the special muzzleloading season.

6. Do I need a special muzzleloader license if I hunt with a muzzleloader during the general firearms deer season?

No. However, you must have your regular hunting and big game licenses.

7. What type of weapon may be used during the special muzzleloading gun season?

Only single-shot muzzleloading guns, .45 caliber or larger, may be used during the special muzzleloading seasons. Flintlock or percussion weapons are permitted. Sabots and telescopic sights may not be used during the special muzzleloading seasons.

8. Am I required to wear blaze orange while hunting during the special muzzleloading season?

No. Blaze orange clothing is required during the general firearms deer season. However, hunters are encouraged to wear blaze orange during the special muzzleloading seasons.

9. Does the special muzzleloading license permit me to harvest bear or turkey?

No, the license does not apply to animals other than deer. To hunt species which are in season at this time you need a basic hunting license and a big game license.

10. May I use my deer hounds during the special muzzleloading season?

The use of dogs to hunt deer during any special muzzleloading season is prohibited.

Canada geese; photo by Leonard Lee Rue III.

Fees

Lifetime license to hunt (Big game license and all special stamps are required in addition to this license) $250.00

Nonresident lifetime license to hunt 500.00

County or city resident to hunt in county or city of residence 5.00

State resident to hunt statewide 12.00

State resident junior to hunt statewide (15 years and under) 7.50

Disabled resident special lifetime license to hunt (Big game license and all special stamps are required in addition to this license) 5.00

Disabled Veteran resident lifetime license to hunt and fish 5.00

Nonresident to hunt statewide 60.00

Nonresident 3-day trip license to hunt statewide 30.00

State resident big game license to hunt deer, bear and turkey statewide required in addition to county or state hunting license (holders of senior citizen, age 65, license exempted) 12.00

State resident junior big game license to hunt deer, bear and turkey statewide (15 years and under) 7.50

State resident muzzleloading license to hunt statewide 12.00

Nonresident muzzleloading license to hunt statewide 25.00

State resident archery license to hunt statewide 12.00

Nonresident big game license to hunt deer, bear and turkey statewide, required in addition to hunting license 60.00

Nonresident archery license to hunt statewide 25.00

Special stamp to hunt deer, bear in Alleghany, Craig, Floyd, Grayson, Highland, Rockbridge, Russell, Smyth, and Wythe counties, in addition to other licenses, and sold only by the clerks of those counties (holders of senior citizen, age 65, license exempted) 1.00

Nonresident special stamp in Russell County 1.00

Nonresident special stamp in Alleghany, Craig, Floyd Grayson, Highland, Rockbridge, Smyth, and Wythe counties 5.00

Senior citizen resident (age 65) license to hunt 1.00

Senior citizen resident (age 65) license to trap 1.00

National forest permit (stamp) to hunt, fish or trap on national forests, required in addition to hunting license (holders of senior citizen, age 65, license exempted) 3.00

Permit to hunt or trap on Appomattox-Buckingham, Cumberland-Prince Edward and Pocahontas State Forests (sold by the Division of Forestry) may be obtained from Forest Headquarters or Clerk of Court in local counties 5.00

Federal migratory bird hunting stamp to take migratory waterfowl, required of persons 16 years of age and over in addition to hunting license and sold at U.S. Post Offices 12.50

Virginia migratory waterfowl stamp (voluntary) 5.00

Nonresident to hunt on shooting preserves only obtainable in counties in which preserves are located 12.00

County or city resident to trap in county or city of residence 10.00

State resident to trap statewide 35.00

Nonresident permit for trapping on private land by permission 130.00

Hunting Laws

Blaze Orange Required

Every hunter or person accompanying a hunter during a firearms deer season shall wear a blaze orange hat or blaze orange upper body clothing that is visible from 360 degrees or display at least 100 square inches of solid blaze orange material at shoulder level within body reach and visible from 360 degrees. Blaze orange is not required during the special muzzle loading season or during spring gobbler season. Fall turkey hunters will be required to wear blaze orange during that part of the fall turkey season that falls within the firearms deer season. Those not required to wear blaze orange are: waterfowl hunters who hunt from stationary or floating blinds, over decoys, in marshes and swamps, or from a boat or other floating conveyance; individuals participating in hunting dog field trials and fox hunters on horseback without firearms.

Steel Shot Zones

Effective with the 1990-91 waterfowl hunting season, steel shot is now required in Chesterfield, Essex, Henrico, King George, Lancaster, Louisa, Montgomery, Northampton, Powhatan, and Surry counties and the city of Richmond. The following already have steel shot zones in place: Accomack, Charles City, Gloucester, James City, King William, Middlesex, New Kent, Northumberland, Westmoreland, and York counties and in the cities of Chesapeake, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Virginia Beach, and Williamsburg. Effective with the 1991-92 waterfowl hunting season, steel shot will be required statewide for waterfowl hunting.

Hunting Seasons

Hunting seasons and bag limits are set by the Game Department on a two-year basis as changes in game habitat conditions, game populations, hunting pressure, and other factors dictate. In some cases, counties have adopted local ordinances relating to the use of rifles and shotgun slugs, firearms safety zones, and hunting in public places (such as along roads). It is crucial to refer to the hunting regulations for these county differences.

The hunting regulations are brought up-to-date and published each year around the first of July. They are distributed through license agents and sporting goods outlets throughout the state.

Hunter Education

All first-time hunters and anyone from the ages of 12 to 15 years old will have to demonstrate that they have successfully completed an approved hunter education course before they can buy a hunting license. Persons 16 years old or over will be exempted if they have held a hunting license in prior years. Virginia recognizes all other states and countries hunter education programs. For convenience, current licensed hunters should save their old licenses until they buy their new ones. For information on hunter safety courses in your area, contact the hunter education training sergeants listed below or call toll free 1-800-252-7717.

Hunter Education Training Sergeant Phone Numbers:

Region 1
Diane Thompson, Deep Creek Office,
(804) 683-2868

Region 2
Mike Ashworth, Vinton Office
(703) 857-7704

Region 3
Harry Street, III, Marion Office
(703) 783-4860

Region 4
Jess Sager, Staunton Office
(703) 332-9210

Region 5
Randy Grauer and Rex Hill, Fredericksburg Office
(703) 899-4169

Where to Hunt

Finding good places to hunt in Virginia requires planning. Simply traveling the highways and byways until you see unposted land is not the right way to hunt at all!

No privately owned land, posted or not, is open to hunting without first obtaining permission. Written permission is required on posted land and verbal permission in all other cases. Posted land, in addition to signs, may be recognized by silver or aluminum painted stripes on trees. Public hunting lands (state and federal) are also available, as well as lands managed by private timber companies. Below is a description of the public hunting lands available in Virginia.

Game Department Public Hunting Lands

The Department of Game and Inland Fisheries owns approximately 176,000 acres of land in Virginia purchased with hunter license dollars and open to public hunting with a minimum of restrictions. With the exception of the daily blind permits on waterfowl areas at Back Bay and Hog Island, there is no charge for hunting on these areas.

Hunting seasons and bag limits on Department areas usually conform to those for the surrounding county. Most are open for the early archery seasons. Dove hunting is permitted during the regular open season on Wednesdays and Saturdays only. Hunter access roads on Department lands normally open to motor vehicles will be open as indicated (weather permitting):

West of the Blue Ridge: 1st Saturday in October-2nd Saturday in February and 1st Saturday in April to 3rd Saturday in May.

East of the Blue Ridge: 1st Saturday in October-2nd Saturday in February and 1st Saturday in April to 3rd Saturday in May.

Foot travel is invited on roads closed to motor vehicles.

Primitive camping (no developed facilities) is permitted, except as other-

wise posted, on Department lands not to exceed a maximum of 7 days and in groups not to exceed 3 camping units. Camping is prohibited on or within 100 yards of any Department owned or controlled boat ramp or fishing lake.

Amelia Wildlife Management Area —2,217 acres in Amelia County. Deer, turkey, squirrel, rabbit, quail, dove, and waterfowl. David N. Ellinghausen, Wildlife Biologist Assistant, c/o Hunting Information, HCO6, Box 46, Farmville, VA 23901.

Back Bay Hunting Areas—Pocahontas, 796 acres; Trojan, 351 acres. Fee hunting areas with blinds allocated by drawing. Information on blinds, fees, and drawings available from the Game Department after Labor Day. Lionel Ewell, Area Manager, P.O. Box 7159, Virginia Beach, VA 23457.

Briery Creek Wildlife Management Area—2,968 acres in Prince Edward County. Deer, turkey, quail, dove, rabbits, squirrels and waterfowl. Waterfowl hunting permitted during regular open season on Wednesday and Saturdays and season opening date only. Robert L. Turney, WMA Supervisor, Route 1, Box 143-A, Cartersville, VA 23027.

C. F. Phelps Wildlife Management Area—4,540 acres in Fauquier County. Deer, turkey, squirrel, rabbit, quail, and waterfowl. Good access to Rappahannock River. Robert D. Henson, Wildlife Biologist Assistant, Route 2, Box 105, Remington, VA 22734.

Chickahominy Wildlife Management Area—5,155 acres in Charles City County. Deer, turkey, squirrel, rabbit, quail, dove and waterfowl. Floating waterfowl blinds or hunting from shore with a distance of 500 yards between hunters. Primitive camping available with a maximum stay of 7 days. David Brime, WMA Supervisor, Route 1, Box 115, Charles City, VA 23030.

Clinch Mountain Wildlife Management Area—25,477 acres in Smyth, Russell, Tazewell and Washington counties. Bear, deer, turkey, squirrel, rabbit, grouse and waterfowl. Dan Lovelace, WMA Supervisor, Route 2, Box 569, Saltville, VA 24370.

Crooked Creek Wildlife Management Area—1,785 acres in Carroll County. Deer, turkey, rabbits, squirrel and grouse. D.H. Martin, WMA Supervisor, Rt. 2, Box 171, Woodlawn, VA 24381.

Elm Hill Wildlife Management Area —1,372 acres in Mecklenburg County. Upland game and doves. Danny W. Johnson, WMA Supervisor, Route 2, Box 100, Clarksville, VA 23927.

Fairystone Farms Wildlife Management Area—5,343 acres in Patrick and Henry Counties. Camping nearby at Fairystone State Park and Philpott Reservoir. Deer, turkey, squirrel, raccoon, dove and waterfowl. Mark Frank, WMA Supervisor, Route 2, Box 185, Bassett, VA 24055.

G. Richard Thompson Wildlife Management Area—4,160 acres in Fauquier County. Deer, turkey, squirrel, and grouse. Irvin L. Kenyon, Jr., WMA Supervisor, Route 1, Sperryville, VA 22740.

Gathright Wildlife Management Area —13,428 acres in Bath County. Deer, turkey, squirrel, and waterfowl. Kenneth R. Sexton, WMA Supervisor, Route 2, Box 648, Hot Springs, VA 24445.

Goshen Wildlife Management Area —16,128 acres in Rockbridge County. Bear, deer, turkey, squirrel, and grouse. H. Eugene Sours, WMA Supervisor, Box 32, Swoope, VA 24479.

Hardware River Wildlife Management Area—1,034 acres in Fluvanna County. Deer, turkey, squirrel, rabbit, quail, waterfowl and dove. Robert D. Henson, Wildlife Biologist Assistant, Rt. 2, Box 105, Remington, VA 22754.

Havens Wildlife Management Area —7,160 acres in Roanoke County. Bear, deer, turkey, squirrel, and grouse, Foot access only. Al Guthrie, Wildlife Biologist Supervisor, P.O. Box 205, Ripplemead, VA 24150.

Hidden Valley Wildlife Management Area—6,400 acres in Washington County. Bear, deer, turkey, squirrel and grouse. Dan Lovelace, Area Supervisor, Route 2, Box 569, Saltville, VA 24370.

Highland Wildlife Management Area —13,993 acres in Highland County. Bear, deer, turkey, squirrel, rabbit and grouse. Rodger L. Propst, Wildlife Biologist Assistant, HCO3, Box 70, Monterey, VA 24465.

Hog Island Waterfowl Management Area—3,908 acres in Surry County. Bowhunting for deer during special archery early season. Managed waterfowl hunting. Fee hunting area. Advance fee reservation required. Information on fees and drawings available from the Game Department after Labor Day. Clyde Abernathy, Area Manager, RFD, Surry, VA 23883.

Horsepen Lake Wildlife Management Area—2,745 acres (18 acre lake) in Buckingham County. Deer, turkey, squirrel, rabbit grouse, woodcock, dove, quail and waterfowl. Raymond S. Franklin, WMA Supervisor, Route 2, Box 626, Appomattox, VA 24522.

James River Wildlife Management Area—671 acres in Nelson County. Deer, turkey, squirrel, raccoon, rabbit, quail, dove and waterfowl. Raymond S. Franklin, WMA Supervisor, Route 2, Box 626, Appomattox, VA 24522.

Little North Mountain Wildlife Management Area—17,538 acres in Augusta and Rockbridge Counties. Bear, deer, turkey, squirrel, and grouse. H. Eugene Sours, WMA Supervisor, Box 32, Swoope, VA 24479.

Mockhorn Island Wildlife Management Area—9,452 acres in Northampton County. Rail and limited waterfowl. Accessible by boat only. Granville Ross, WMA Supervisor, P.O. Box 212, Hallwood, VA 23359.

Pettigrew Wildlife Management Area —934 acres in Caroline County. Deer, turkey, squirrel, and quail. Milton Gallahan, WMA Supervisor, Route 3, Box 1186, King George, VA 22485.

Powhatan Wildlife Management Area—4,415 acres in Powhatan County. Deer, turkey, squirrel, rabbit, quail and dove. David N. Ellinghausen, Wildlife Biologist Assistant,

HCO6, Box 46, Farmville, VA 23901.

Ragged Island Wildlife Management Area—1,537 acres in Isle of Wight County. Waterfowl and deer by shotgun and bow and arrow only. Clyde Abernathy, WMA Supervisor, RFD, Surry, VA 23883.

Rapidan Wildlife Management Area —9,525 acres in Madison and Green Counties. Bear, deer, turkey, squirrel, rabbit and grouse. Irvin L. Kenyon, Jr., Wildlife Biologist, Route 1, Sperryville, VA 22740.

Saxis Wildlife Management Area —5,775 acres in Accomack County. Deer, raccoon and waterfowl. Granville Ross, WMA Supervisor, P.O. Box 212, Hallwood, VA 23359.

Turkeycock Mountain Wildlife Management Area—2,679 acres in Franklin County. Deer, turkey, squirrel and raccoon. Mark Frank, WMA Supervisor, Route 2, Box 185, Bassett, VA 24055.

White Oak Mountain Wildlife Management Area—2,712 acres in Pittsylvania County. Deer, turkey, squirrel, rabbit, quail and dove. Jessie B. Robertson, Jr., WMA Supervisor, Route 1, Box 76-G, Chatham, VA 24531.

Bobwhite quail; photo by Leonard Lee Rue III.

Waterfowl Blind Drawing On Management Areas

A public drawing for waterfowl blinds is held annually to hunt at Pocahontas, Barbours Hill and Hog Island Wildlife Management Areas. Applications are available from the Game Department's Richmond office after Labor Day.

General Rules and Procedures for Pocahontas, Barbours Hill & Hog Island Areas

Before any persons may hunt on these areas, they must first apply for shooting dates and be awarded same by an authorized representative of the Department of Game and Inland Fisheries. All hunters must check in and out of the respective area headquarters. Only properly completed applications, including a current year Virginia hunting license number (exactly as printed), received in the Richmond office prior to 5 p.m. on October 19, 1990 will be entered in the public drawing. Only one (1) application per person will be accepted for each area. If duplicate license numbers are submitted for an area, both applications will be voided. Send no money with application. A $15 fee will be due from the permittee at the area on the date of the hunt. No cash. After the public drawing, reservations must be obtained in person or by mail only from the appropriate Area Manager.

Pocahontas Area & Barbours Hill Area—$15 fee. Otto Halstead, Area Manager, Box 7100, Virginia Beach, VA 23457

Hog Island Area—$15 fee. Clyde Abernathy, Area Manager, RFD, Surry, VA 23883.

General Rules and Procedures For Trojan Area (Not in Drawing)

There is no public drawing for permits on this area. Permits are issued daily on a first come-first served basis. Priority for Trojan blinds will be given to persons holding Pocahontas permits in the event of unsafe boating conditions on Back Bay. Rental fee is $5 per day for use of a Department-owned blind. Dogs are permitted. The area will be closed to hunting at 2 p.m. daily. Trojan Headquarters is located at the end of Back Bay Landing Rd. off Rt. 615 in Virginia Beach. Area Manager: Otto Halstead, Box 7100, Virginia Beach, VA 23457.

National Forests

The George Washington and Jefferson National Forests provide the largest amount of land open to the general public for hunting in Virginia. Most of the 1.5 million acres of the National Forests is open to public hunting and camping unless specifically designated closed. An annual $3 stamp is required to hunt or fish on the National Forests. The stamp can be purchased at most outlets that sell hunting licenses. Hunting regulations, seasons and bag limits conform with state and county regulations. Individual Ranger District maps may be obtained at any Forest Service Office for $2 each. Information can be obtained from:

George Washington National Forest Headquarters, Harrison Plaza, Harrisonburg, VA 22801, phone (703) 433-2491; Ranger District Offices in Bridgewater, Buena Vista, Covington, Edinburg, Hot Springs and Staunton.

Jefferson National Forest Headquarters, Federal Building, 210 Franklin Road, SW, Roanoke, VA 24001, phone (703) 982-6270; Ranger District Offices in Blacksburg, Wise, Natural Bridge Station, Marion, New Castle and Wytheville.

Cooperative Public Hunting Areas

The Department of Game and Inland Fisheries is responsible for wildlife management on some 250,000 acres of land it does not own in return for hunting privileges and benefits to sportsmen.

Piedmont State Forests

These are owned by the Virginia Department of Forestry. **Cumberland State Forest,** 16,779 acres in western Cumberland County north of U.S. 60. **Appomattox-Buckingham State Forest,** 19,706 acres south of Route 24 in Appomattox and Buckingham counties. **Prince Edward-Gallion State Forest,** 6,964 acres in eastern Prince Edward County north of Route 360. **Pocahontas State Forest,** 5,648 acres south of Richmond in Chesterfield County. A portion of this area which adjoins the state park is closed to hunting.

All of the above are open to holders of a $5.00 state forest stamp available from agents located near the properties. A state or county hunting license is required. To purchase a stamp by mail, the individual's name, state hunting license number, and a self-addressed stamped envelope is required. Maps are available from each of the State Forest offices.

The season for some animals may be different on the State Forest than in the county in which they are located. These are specified in the Game Law Summary produced by the Department of Game and Inland Fisheries. In addition, there are safety zones established on each forest around the offices and houses where no hunting is allowed.

For information, contact: James E. Bowen, Superintendent of State Forests. Phone (804) 492-4121. For National Forest maps and forest stamp information, write to: Cumberland State Forest, Route 1, Box 250, Cumberland, VA 23040.

Military Areas

Marine Corps Base, MCCDC Quantico. 50,000 acres in Fauquier, Prince William and Stafford counties. A minimum of 15% of the available hunting spaces each day are reserved for off-post civilian hunters. All must purchase the annual base hunting permit after attending a mandatory hunting orientation/safety lecture which is given at the base game checking station. Lectures are given from October 1-January 31 and during spring gobbler season. For information concerning cost of permits and times of lectures, call (703) 640-5523. Daily hunting quotas vary depending upon military commitments. Shotgun slugs are required for deer hunting. Deer may not be hunted with dogs or by driving. Certain areas allow muzzleloaders.

Fort A.P. Hill Military Reservation. 76,000 acres in Caroline County. Fee permits ($20-adults, $10-youths) issued on a first-come-first-served basis from hunting section office. Shotgun and bow and arrow are only weapons permitted. Dogs may not be used to hunt deer. Dove hunting on Wednesdays and Saturdays only during the regular dove season. Maps available. Write to: Community Recreation Division, Attn: Hunt Check Station, Fort A.P. Hill, Bowling Green, Virginia 22427-5000. Enclose a self-addressed stamped envelope. Phone (804) 633-8300 or 633-8219.

Radford Army Ammunition Plant. 2,800 acres in Pulaski County. Deer is the only legal game that can be hunted. Hunters are selected from Game Department applications received before September of each year. Applications are available beginning July 1st of each year. A total of 200 hunters are selected for 4 archery hunts and 90 selected for 3 shotgun hunts. All hunting is restricted to Saturdays and holidays (Thanksgiving). All hunting is restricted to the available stands. Application fee is $3.50 and the hunt permit is $10.00. All other appropriate licenses are required (big game, archery, state license). For further information, contact: Commander RAAP, Attn: Deer Hunt Coordinator, Radford, VA 24141. Other contacts: Virginia Department of Game and Inland Fisheries, Rt. 1, Box 107, Marion, VA 24354. Phone: (703) 783-4860 or the Richmond office at 4010 W. Broad Street, Richmond, VA 23230-1104. Phone: (804) 367-1000.

Fort Pickett Military Reservation. 45,198 acres in Brunswick, Dinwiddie and Nottoway counties. Hunting normally permitted Monday through Saturday except Christmas Day. Daily hunting quotas are based on troop training activities. Geographical areas on Fort Pickett may be closed at any time due to military training missions on the installation. Dogs may be used to hunt both big and small game. Dove hunting is permitted on Wednesdays and Saturdays (afternoon only). Hunters **must** wear blaze orange (minimum of 500 square inches above the waist) during the deer firearms season. In addition to a state hunting license, a Fort Pickett permit is required. The permit fee is $12.00. Hunting information and map may be obtained by *sending a self-addressed, stamped envelope* to: HQ, U.S. Army Garrison, Attn: Game Check Station, Fort Pickett, Blackstone, VA 23824. For additional information/inquiries, phone (804) 292-2618.

U.S. Army Corps of Engineers

- 4,750 acres in Franklin, Henry, and Patrick counties surrounding Philpott Lake. No permit required. Map available from Resource Man-

ager, Route 6, Box 140, Bassett, VA 24055.

- 38,000 acres in Charlotte, Halifax and Mecklenburg counties surrounding John H. Kerr Reservoir. No special permit required. Nineteen developed wildlife management areas. Map and management area guide available from Reservoir Manager, Route 1, Box 76, Boydton, VA 23917.
- 6,419 acres in Dickenson County surrounding John W. Flannagan Dam and Reservoir. No permit required. For additional information, contact Resource Manager, Route 1, Box 268, Haysi, VA 24256-9736; phone (703) 835-9544.
- 88 acres in Wise County surrounding North Fork of Pound River Lake. No special permit required. For additional information, contact: Project Supervisor, Route 1, Box 369, Pound, VA 24279-9369; phone (703) 796-5775.

State Parks

When traveling through State Park areas not designated for hunting, guns *must* be unloaded and cased.

Fairystone State Park—Route 2, Box 723, Stuart, VA 24171. 2,400 acres in Patrick and Henry counties only. No permit required. Remainder of park closed to hunting, but open for other park activities. No maps.

Sailor's Creek Battlefield State Park—240 acres in Amelia and Prince Edward counties. Special designated areas for hunting are marked. For information, contact Twin Lakes State Park, Route 2, Box 70, Greenbay, VA 23942. No permit required. No maps.

Grayson-Highland State Park—Route 2, Box 141, Mouth of Wilson, VA 24363. 1,200 acres in Grayson County. No permit required. Maps available, phone (804) 786-1712.

False Cape State Park—4,321 acres in Virginia Beach. Limited waterfowl hunting by permit. Limited deer and feral hog hunting. Contact Area Manager, Otto Halstead, Box 7100, Virginia Beach, VA 23457.

Occoneechee State Park—Box 818, Clarksville, VA 23927. 2,100 acres in Mecklenburg County on Buggs Island Lake. No permit required. Maps available, phone (804) 786-1712.

While not designated for hunting, there will be primitive camping available at Bear Creek Lake State Park which is adjacent to Cumberland State Forest. For information, phone (804) 786-1712.

Industrial Land

Appalachian Power Cooperative Management Areas—6,000 acres surrounding Smith Mountain Lake in Bedford and Pittsylvania counties. No permit required. No maps available. For information, contact Department of Game and Inland Fisheries, Route 1, Box 76-G, Chatham, VA 24531.

Union Camp Corporation Cooperative Management Area—Union Camp Corporation, Nottoway Forest, Rt. 1, Box 63AA, Sedley, Virginia 23878. 6,000 acres in Brunswick County near Lawrenceville south of Route 58 in several tracts. No permit required. Map available.

Westvaco Cooperative Management Area—Westvaco, Timberlands Division, P.O. Box 577, Rupert, WV 25984. Phone (804) 352-7132. 900 acres in Amherst County. No permit required. Maps are not available.

Corporate Timberlands

An annual permit is required by each of these companies. Fees vary. A state license is required in addition to timber permit.

Bear Island Timberlands Company, L. P. Hunting Permits, P.O.

White-tailed deer; photo by Irene Vandermolen.

Box 2119, Ashland, VA 23005. Approximately 120,000 acres are available for permit hunting throughout central Piedmont Virginia. Permits are valid on any company properties which are not red posted or leased to private hunt clubs. Permits may be obtained by mail or in person at Bear Island's Mill Site in Hanover County on Route 738 approximately two miles east of Route 1 and six miles north of Ashland. Cost of permits is $10 each, and $5 disabled and senior citizens with proof of disability or age required. Individual county maps are available at $1 per map. Please contact Bear Island for a specific listing of counties with tracts available for permit hunting. Mail requests for maps must be accompanied by a 9″ x 12″ self-addressed envelope with 45¢ postage. Permits are valid from September 1, 1990 through May 31, 1991.

Champion International Corporation, Forest Lands Manager, P.O. Box 309, Roanoke Rapids, NC 27870. Some acreage is leased for exclusive use and is so posted. About 20,000 acres in southside counties, including Brunswick, Halifax, and Lunenburg, is open for permit hunting. Individual county permits are $3 and statewide permits are $7. County maps showing permit hunting lands are available for $1 each if the request is accompanied by a 10″ x 13″ or larger self-addressed envelope with postage for three ounces.

Chesapeake Corporation—Public hunting permits are sold at the four Woodland Regional Offices during normal business hours or by mail. The West Point Office will be open the first three Saturday's in November from 9 A.M -Noon. All mail requests must be accompanied by a self-addressed, stamped envelope. Blanket requests for maps will not be honored. Permits will not be issued to persons under the age of seven. Permits are valid for hunting only. Permits are $10. The Woodland Area offices are:

West Point Region—approximately 48,000 acres located in Charles City, Gloucester, James City, King and Queen, King William, Mathews, Middlesex, and New Kent counties (VA). Chesapeake Corp., Hunting Permits, 15th & Main Streets, West Point, VA 23181, (804) 843-5298.

Pocomoke Region—approximately 15,000 acres located in Accomack, (VA), Dorchester, Caroline, Wicomico, Worcester, Somerset (MD), and Sussex (DE). Chesapeake Corp., Hunting Permits, Box 300, Pocomoke City, MD 21851, (301) 957-1521.

Keysville Region—approximately 50,000 acres located in Appomattox, Buckingham, Charlotte, Cumberland, Fluvanna, Goochland, Halifax, Henry, Lunenburg, Mecklenburg, Nottoway, Pittsylvania, Powhatan and Prince Edward counties (VA). Chessapeake Corp., Hunting Permits, Box 450, Keysville, VA 23947, (804) 736-8505.

Warsaw Region—approximately 25,000 acres in Caroline, Essex, King George, Lancaster, Louisa, Northumberland, Richmond, Spotsylvania, and Westmoreland counties (VA). Chesapeake Corp., Hunting Permits, Box 942, Warsaw, VA 22572, (804) 333-4325.

The Glatfelter Pulp Wood Company, Thomas N. Reeder Jr., District Manager, Box 868, Fredericksburg, VA 22404. Phone (703) 373-9431. Counties with one or more tracts open for hunting include Appomattox, Buckingham, Caroline, Culpeper, Cumberland, Fauquier, Fluvanna, Halifax, Hanover, King George, Louisa, Lunenburg, Nottoway, Orange and Spotsylvania counties. Total is about 25,000 acres. Some acreage is leased for exclusive use and so posted; all other unposted properties open to permit holders. Permits cost $11 and require state license information. Special regulations are printed on back of permit. Maps are available for $1.00. All requests must be accompanied by stamped self-addressed envelope.

Lester Properties, Kenneth O. Scruggs, Forestlands Department Manager, Post Office Drawer 4991, Martinsville, VA 24115. Phone (703) 632-2195 ext. 250. Tracts are available for lease at negotiable prices, but choice areas are going quick. No public hunting is available. There are 20,000 acres in the counties of Franklin, Halifax, Henry and Pittsylvania. Maps are available upon request.

Westvaco, Timberlands Division, P.O. Box 577, Rupert, WV 25984. More than 160,000 acres open in 20 counties, including Appomattox, Botetourt, Buckingham, Campbell, Halifax, Pittsylvania and Rockbridge. Some tracts leased exclusively to hunt clubs. Combination hunting and fishing permits for $10, upon request and accompanied by self-addressed, stamped envelope. Maps are not available.

Resources

Sporting Clays

The Department of Game and Inland Fisheries operates a sporting clays facility on 105 acres of the Amelia Wildlife Management Area.

A group of six shooters move through a course of simulated hunting situations and are challenged with clay targets imitating flying ducks, running rabbits, and flushing quail among others. The cost, per round of 50, for adults is $15.00 or $12.00 with a valid Virginia hunting license and for youths (12-15 years) is $7.50 or $5.00 with a valid Virginia hunting license.

The following items are necessary for your visit: Shotgun (minimum 2-shot capacity is recommended), 50 shotgun shells (shot size not to exceed #7½), 11 steel shot shotgun shells (shot size not to exceed #4) if you wish to shoot the over-water stations, hearing protection (earplug type are recommended) and safety glasses.

The course is open on Fridays, Saturdays and Sundays by appointment only. Reservations are required and will be made on a first-come, first-served basis. To make a reservation, call the Game Department at 1-800-252-7717 or 804-367-1000.

Maps

A good map is essential for a successful hunting experience. Topographic maps are available from the following sources:

Virginia Reproduction and Supply Company, 9 W. Cary St., Richmond, VA 23220, (804) 643-9116.

Virginia Division of Mineral Resources, Box 3667, Charlottesville, VA 22903, (804) 293-5121.

U.S. Geological Survey, Branch of Distribution, Box 25286, DFC, Denver, CO 80255. (Use this address if you know the particular map you want.)

U.S. Geological Survey, National Cartographic Information Center (NCIC), 507 National Center, Reston, VA 22902, (703) 860-6045. (Use this address to request a index of the state maps available to find the particular map you are looking for.)

Contact each firm individually for procedures and fee information.

P.H.O.N.E. (Poachers Hurt Our Natural Environment Program)

The Department of Game and Inland Fisheries established a violation reporting program on October 1, 1986.

A toll-free number (1-800-237-5712) is available 24 hours a day, 7 days a week including holidays, to report game, fish or boating violations. The P.H.O.N.E. Line is staffed 8 a.m. - 5 p.m. daily. An answering system will record call-back requests after hours.

A reward fund has been established by The Virginia Sportsmen Reward Fund, Inc., and is offered for information leading to an arrest. Callers may remain anonymous and are not required to testify in court.

Virginia Department of Game and Inland Fisheries
4010 West Broad Street, Richmond, Virginia 23230-1104.
804/367-1000

The Department of Game and Inland Fisheries shall afford to all persons an equal access to Department programs and facilities without regard to race, color, religion, national origin, disability, sex or age. If you believe that you have been discriminated against in any program, activity or facility, please write to: Virginia Department of Game and Inland Fisheries, ATTN: Compliance Officer, 4010 West Broad Street, P.O. Box 11104, Richmond, Virginia 23230-1104.

Dabbling With Decoys

Above: photo by Larry Ditto. Left: Heron "confidence decoy," photo by Curtis Badger

by Curtis Badger

Always looking for ways to create the perfect decoy rig, waterfowl hunters are reviving an interest in so-called "confidence decoys."

Joel Barber, the decoy historian whose 1934 classic *Wild Fowl Decoys* is still a top seller, is credited with coming up with the term confidence decoy. A confidence decoy, said Barber, is a bird of a species other than that being hunted, whose presence in the decoy rig imparts an aura of naturalness and contentment.

Over the years, hunters have stretched the limits of imagination to impart "an aura of naturalness and contentment" to their decoy rigs. We've supplemented our standard decoys with gulls, swans, herons, feeding birds, sleeping birds, swimming birds, and even flying birds. But a valid question regarding confidence decoys might be whether they are intended to impart confidence in the birds being sought, or in the hunter.

A friend of mine uses plastic herons, gulls, and sometimes swans—anything to legally gain an advantage. "I want to create a contented little community of waterfowl," he says. "You don't just go to the marsh and throw two dozen decoys into a pond. You have to use some creativity."

My friend claims the extra effort of carrying and setting up his assortment of confidence decoys pays off. At least it gives him pleasure. He approaches duck hunting with the attitude of a builder of model railroads. It's not the final result that's important, but the act of preparation.

Grayson Chesser, a former Virginia game warden and hunting guide who now carves decoys professionally, often uses swans, herons, or gulls with his waterfowl rig, not simply to give confidence to passing birds, but to add visual interest to a decoy spread. Grayson isn't sure how much confidence they impart, but he does know they help attract attention to his rig of decoys.

Grayson often uses swan decoys with his rig of Canada goose field decoys. "I think the swans give the rig more visual impact," says Chesser. "You frequently see swans feeding with geese around here, and the swans really stand out. When you add a few swan decoys your rig becomes much more visible."

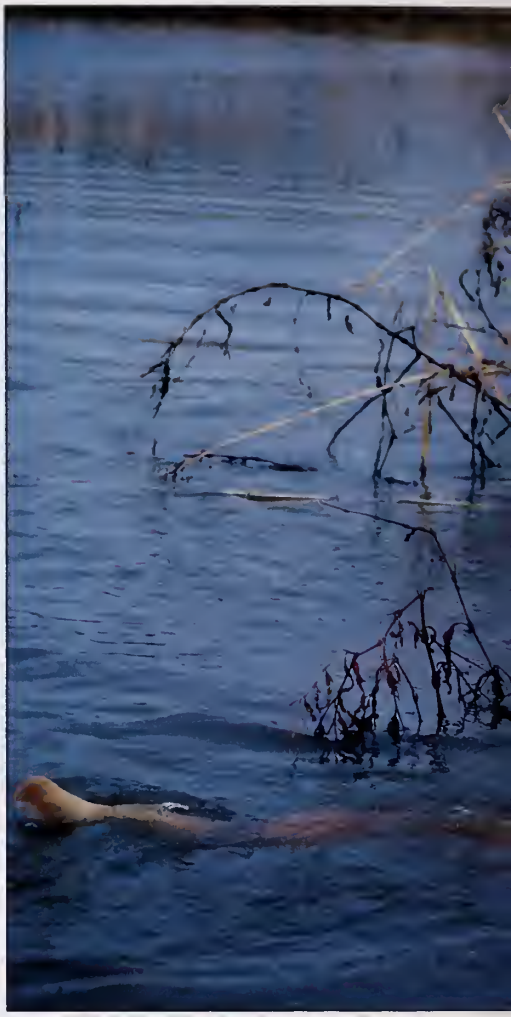
Grayson could find no commercial swan decoys, and because carved wooden swans would be prohibitively heavy, he made his by repainting several super magnum goose decoys.

Grayson does carve herons and gulls, which he sometimes adds to his dabbling duck rig. "I don't know how much confidence they give other birds," he says, "but they're big and white and they attract attention. Usually passing ducks will see them, and then pick up your decoy rigs."

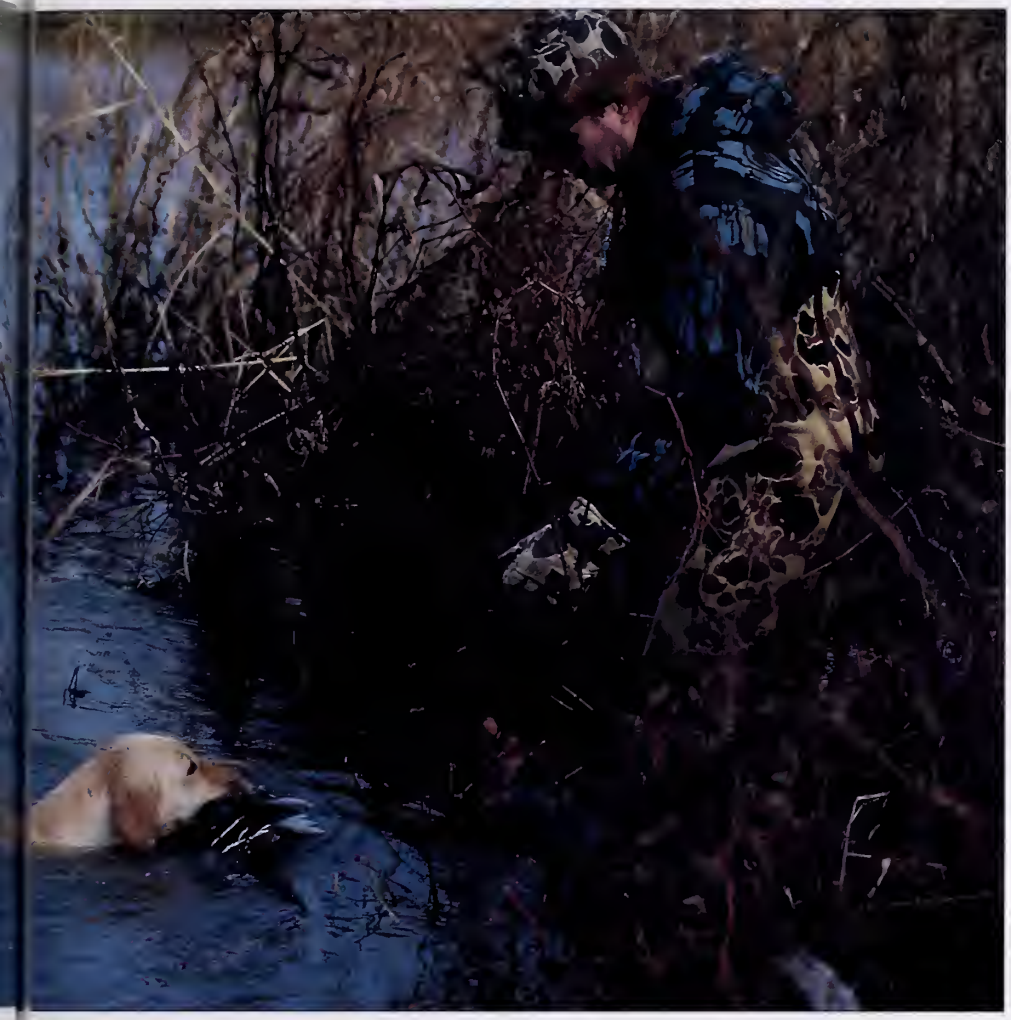
Most confidence decoys can be divided into two camps: those intended to add visual impact, and those whose main function is to help portray a natural scene of contented waterfowl. Swan decoys do both. They are large enough to get the attention of passing pintails traveling at supersonic speed, yet they seem a natural part of a dabbling duck rig. Wigeon in particular seem comfortable hanging around with swans, feeding on detritus stirred up by the big birds. So one or two swan decoys with a rig of wigeon should both pique the curiosity of passing birds, as well as impart confidence to scavenging dabblers such as wigeon.

Herons and gulls, to a lesser extent, provide visual interest, and they add realism to a decoy rig in most hunting situations. Dr. George Ross Starr, Jr., author of *Decoys of the Atlantic Flyway*, wrote of using gull decoys to supplement a rig of black ducks. "Black ducks and gulls don't always get along as well as they might," wrote Dr. Starr. "We have sat in the blind and watched gulls power dive into a flock of feeding blacks and chase them all over the place and worry them half to death. So certain gunners made up a gull or two and put them out fifteen yards or so to one side of the black duck decoys or as stick-ups on the marsh. An approaching black duck feels more secure when he sees his own kind and gulls sitting quietly together."

Although Joel Barber defined confidence decoy as a bird other than that being hunted, we could define the term a little more loosely and come up with an intriguing list of confidence decoys. In one way or another, decoys intended to impart an aura of naturalness and contentment have been around since market gunning days. Harry V. Shourdes, a New Jersey decoy maker, in the late 1800's made a series of flying brant, with wings outstretched as if they were coasting in to land among friends. Shourdes made the decoys



Since the outlaw of live decoys in waterfowl hunting, the perfection of realistic artificial decoys has been the obsession of decoy carvers and waterfowl hunters everywhere. And today, many hunters are turning their energies to creating realistic decoy spreads, to include species other than the ones hunted in order to create a sense of "naturalness" for wary waterfowl. **Above:** *Photo by F. Eugene Hester.* **Right:** *Exquistely carved decorative waterfowl decoys; clockwise: shoveler, wood duck and green-winged teal; staff photo.*



with a half-inch hole drilled in the bottom to accommodate a long wooden dowel. The decoys were used as stick-ups with a floating brant rig, and when placed facing upwind, with the water rippling toward them, must have given a credible performance of brant gliding in to join a companionable bunch of waterfowl.

Dr. Starr writes that Delane Doughty, a New Jersey market gunner of the Shourdes era, took Shourdes' flying brant concept one step farther. Doughty attached hooks fore and aft to the top of the decoy, which then was attached to a wire that ran from a tall stake some distance down the shoreline to a short stake set among the decoys. When a flock of brant approached, Doughty would release the flying brant with a trip-string, and it would glide down the wire and splash into the water, where it would float on its belly with its wings outstretched like a crippled airplane in a World War II movie.

Whether Doughty's flying brant outperformed the Shourdes still life version was apparently unrecorded by Dr. Starr and other decoy historians.

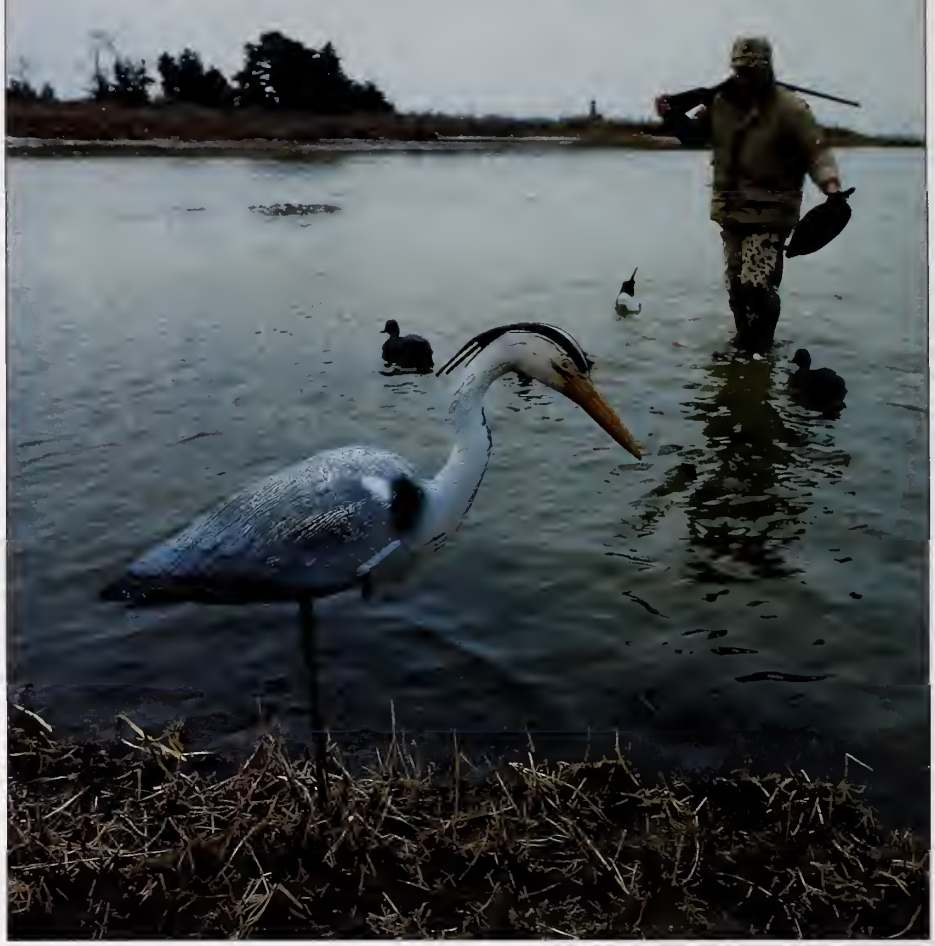
Dan Brown, a decoy carver who hunts the eastern rim of the Chesapeake Bay, carves gulls to supplement his rig, and sometimes will use a great blue heron or egret. "Gulls are good because they're white and they attract the attention of passing waterfowl," he says. "I'm not so sure about herons. Herons are impossible to get close to, so if you have one next to your blind the ducks might think it's safe. I'm not sure ducks have that ability to reason, but a blue heron can't hurt."

Sometimes coming up with confidence decoys means going against the conventional wisdom of waterfowl hunting. High-headed, alert decoys are usually avoided because they give the impression of being alarmed and frightened. But Brown has had success using one or two high-headed decoys with this regular mallard rig as confidence decoys.

"My studio is on a small creek, and we feed a lot of mallards off the dock," says Brown. "I've noticed

that when birds come in they'll pitch off from where the other birds are feeding, and they'll look around for a few minutes and check things out before swimming in to where the food is. So when I go hunting I'll have most of the decoys around the blind, maybe even placing a few stick-ups on the marsh as if they are sunning themselves, and then I'll put one or two high-headed, alert birds farther out, like they just came in. These decoys really get the attention of passing birds, and most of the time the ducks will decoy to the high-headed birds instead of to the ones that appear to be feeding."

Hunters seeking to supplement their rigs with a few confidence decoys had an advantage during the pre-plastic era when most decoys were made by hand. Old time decoy makers carved birds in feeding, sleeping, preening, and even courting poses. Most dabbling duck rigs included a few "tip-ups," which consisted of just the aft end of a decoy, weighted so it would float tail up, thus providing the illusion of a feeding duck.



Great blue heron decoys are a popular confidence decoy among waterfowlers, some of whom propose that since herons are impossible to get close to, setting a heron decoy up near a blind gives a sense of security to the incoming ducks; photo by Curtis Badger.

Unless you happen to be handy at carving decoys, or sufficiently well-heeled to afford a contemporary hand-made rig, your hunting decoys are most likely of the molded plastic variety, which, with their zombie-like stares, more closely resemble ducks from "The Night of the Living Dead" than a contented community of waterfowl. They need all the help they can get, and thus we see as we enter the decade of the nineties a major comeback in the market for confidence decoys.

Outdoor catalogues, which not long ago offered a fairly limited selectin of waterfowl decoys, now offer everything from traditional hand-made cork decoys to motorized geese which do everything but eat and digest corn. *Cabela's*, the Nebraska mail order outfitter, offers six pages of decoys in its current catalogue, and more are waiting in the wings. You can buy full-size great blue herons, tip-up feeding decoys, sleepers, flying decoys, and even that most questionable of confidence decoys, a 10-inch ear of corn in lifelike plastic.

"The decoy selection is growing in response to the market," says *Cabela's* decoy buyer Fred Neal. "I think people are responding to shorter seasons and smaller bag limits by being better prepared. You have more people competing for fewer birds, so hunters don't mind spending more money on decoys if they think it will give them an advantage."

Neal said some confidence decoys, such as the plastic herons, have been around for years, but manufacturers now are offering more sophisticated decoys, including some with motorized, flapping wings. "Several years ago we had the Flutter Duck, which was a battery-operated decoy that swam around in a circle," said Neal. "It didn't do all that well, and it's been replaced by more state-of-the-art decoys that either actually move, or suggest motion."

Cabela's sells both a motorized and manual version of a Canada goose with black flapping wings. The motion of the wings, a variation of the technique of flagging, gets the attention of passing birds. The battery-operated version can be placed away from the blind or pit, thus focusing the birds' attention away from the hunters.

Neal says Carry Lite this fall will introduce a new full size, flying Canada goose which looks remarkably real. The goose has no moving parts, but is placed on a metal stake among floaters or field decoys, facing upwind.

Harry Shourdes, were he alive today, would no doubt be proud that a technique he pioneered with his flying brant a century ago would be mass-produced in the nineties. And now all we need is a contemporary Delane Doughty to figure out a way to make the goose take flight. □

Curtis Badger is director of publications for the Wildlife Art Museum of the Ward Foundation in Maryland and is a frequent contributor to Virginia Wildlife.

Trout Unlimited Donates Boat

The Northern Virginia Chapter of Trout Unlimited has donated a towboat to the Virginia Department of Game and Inland Fisheries for use by its Region 4 fisheries personnel.

The boat, valued at $550, is ideal for electro-shocking work on large streams, particularly special regulation trout streams, stocked trout streams and small warmwater streams. Made from 14 gauge galvanized sheet metal and custom-made at the Shickel Machine Shop in Bridgewater, the boat holds a portable generator and a cooler to hold fish for analysis.

Fisheries Biologist Paul Bugas summed up our appreciation for this generous gift to the Department: "Thanks to the generosity of the Northern Virginia Chapter of Trout Unlimited, this boat will help make our collecting efforts on large streams more efficient and give us many years of service." □

Virginia Open Team Pheasant Championship

The Oakland Farm Shooting Preserve in Orange County will hold its annual open team pheasant championship on November 8, 9, 10, and 11. Designed to test the shooting skills of the hunter and the bird finding and retrieving skills of his dog, this event has become popular in the Midwest, and is catching on here in Virginia.

On Thursday, November 8, single hunters and their dogs will compete in the Super Hunter Competition, while on Friday, Saturday and Sunday, two-hunter and one dog teams will test their skills to find, shoot and retrieve six birds against a 30-minute clock.

Scoring is based on the number of birds bagged, the number of shells used, and the time elapsed. A $1,000 cash prize will be divided among the top three teams.

Dave Pomfret, proprietor of Oakland Farms, will accept entries to the event until 8 p.m. on November 5. For information and registration materials, contact Dave Pomfret at P.O. Box 1265, Orange, VA 22960 or call him at 703/854-4540. □

A Rare Experience

Some 150 sight and hearing impaired children recently visited the Game Department's Montebello Trout Hatchery. This annual event is a part of their stay at Camp Blue Ridge, just down the mountain from the hatchery.

Hatchery supervisor Ralph Cash led the group on a tour of the facility which raises 10,000 trout annually for stocking in Virginia streams. Hatchery foreman F. G. Seaman explained the operation of the facility with assistance from one of the counselors who signed for the hearing impaired visitors.

Members of the group were provided with fish food and fed the trout in the hatchery runs. Large buckets of trout were provided so the visitors, particularly those who were blind, could handle a live fish.

Located high in the Blue Ridge Mountains, Montebello is perhaps the Game Department's most visited facility. Each year an average of 20,000 people tour this fish factory.

Though handicapped by a loss of vision or hearing, the 150 children who visited the Montebello Fish Hatchery were not handicapped in their enjoyment of the trout they were able to touch and feed as part of their tour of the facility; photo by Mel White.

Family Outdoors

Favorite Wildlife Watching Spots

by Carl "Spike" Knuth

Recently, we received a letter requesting information as to where in Virginia some of the better places to view wildlife were located. Although I may have my special favorites, there are an almost inexhaustible number of public lands available to watch wildlife. In many cases an individual's favorite may depend on how well he or she might know an area, and of course, how much time they spend there. A person who gets to thoroughly know just a little corner of a strategically located woodlot, might see as many birds there as he would in a large park or refuge!

Virginia is blessed with a wide variety of federal, state, and municipally-owned lands for the avid wildlife watcher to wander around in. My favorite happens to be the Chincoteague National Wildlife Refuge on Virginia's Eastern Shore in Accomack County.

The refuge has numerous varieties of marsh birds such as herons, egrets and ibises, water birds such as terns, grebes, loons, dowitchers, yellowlegs, plovers and a variety of sandpipers can be seen on the flats feeding at low tide, while songbirds of all kinds, including warblers, flycatchers, woodpeckers, thrushes, finches and others can be found in the variety of habitat. The best times for these species seems to be from April through June. The best times for waterfowl are from November through January. At this time one can see flocks of snow geese, Canada geese, tundra swans, black ducks, mallards, ruddy ducks, buffleheads, shovellers, green-winged teal, gadwall, pintails and mergansers.

Peregrine falcons have been succesfully hacked here and are now nesting naturally. Marsh hawks (harriers), red-tails, sharp-shinned hawks, Cooper's hawks and kestrels all are found on the refuge. Of course, Chincoteague is home to the famous Chincoteague ponies; the little elk from the Orient known as the sika deer; the rare Delmarva fox squirrel, as well as raccoons, foxes, otters, muskrats, and mink. Chincoteague has numerous trails, roads and pull-offs. There are a number of handicapped accessible facilities available. You can also walk the beach on the Atlantic at the Assateague National Seashore which is adjacent to Chincoteague.

Newport News City Park, with Lee Hall Reservoir and the 5½ mile White Oak Trail through the swamp at the upper end is my second favorite place. This park at over 4,000 acres boasts of being the largest municipal park east of the Mississippi River.

November and December will find waterfowl on the lake including ringnecks, redheads, wigeon, mergansers, mallards, tundra swans and Canada geese. From October through early-December, a wide array of songbirds, marsh and water birds and raptors migrate through or winter in the area. A trip to the park in April and May will catch many species on their spring migrations. The area has ospreys, herons, wood ducks, flycatchers, wrens, warblers, thrushes, hawks and seven species of woodpeckers! The park is just off of Route 143 and can be reached by taking the Lee Hall exit or the Route 105 north exit.

From there on it's a toss-up. Obviously, some of the larger parks and refuges have larger acreages and wider varieties of habitat. The more familiar a person becomes with a specific area through each of the seasons, the more wildlife will be seen. Here are some others that I've been able to enjoy:

Dismal Swamp near Suffolk provides some opportunites to see migrating warblers in April and May. The Hog Island WMA in Surry is an excellent spot for waterfowl, especially geese, and marsh birds. False Cape Natural Area State Park and the adjacent Back Bay National Wildlife Refuge also have a variety of marsh birds and waterfowl. Pope's Creek Plantation in Westmoreland is a good place for geese, swans, canvasbacks and songbirds. There are numerous state parks with good wildlife watching potential, but I seem to have had some especially good times at Twin Lakes State Park in Prince Edward. The Division of Forestry has a number of state forests adjacent to the state parks and I've found Cumberland State Forest in Cumberland to be a good one.

Both the George Washington and Jefferson National Forests have six Ranger Districts apiece that offer thousands of acres to watch wildlife, especially forest species that normally breed in the north. I like the Glenwood Ranger District in the Jefferson.

The Department's Coursey Springs Fish Cultural Station in Bath County has songbirds, ospreys and wood ducks. Clinch Mountain WMA in Russell and Washington Counties has a variety of forest species and White Oak Mountain WMA in Pittsylvania will give you an opportunity to see many field and forest species.

No matter what place is your favorite, the key is to go there often, throughout each of the seasons and learn each one well. □

Recipe

Quail—Challenging And Delicious

by Joan Cone

Quail are probably my favorite bird. There is nothing more exciting than seeing our Brittany, Nikki, on solid point and wondering if a single, double or a huge covey will suddenly go rocketing away.

Along with being a challenge for the wing shooter, quail contribute to memorable meals. Every quail dinner begins while afield! Birds should be dressed and cooled down immediately. To insure optimum flavor, quail should not be skinned. Skinning causes birds to dry out during cooking.

Menu:
Pineapple-Baked Quail
Spoon Bread
Honey Almond Carrots
Tomato Aspic Salad
No-Bake Pumpkin Pie

Pineapple-Baked Quail

8 whole quail, skin on
1 can (20 ounces) sliced pineapple, drained, juice reserved
2 teaspoons Worcestershire sauce
2 teaspoons Dijon-style mustard
1 teaspoon dried rosemary
1 tablespoon cornstarch
1 small lemon, thinly sliced
Salt and pepper

Preheat oven to 400 degrees. Arrange quail, breast side down, in a shallow baking dish. Blend pineapple juice, Worcestershire sauce, mustard, rosemary and cornstarch. Pour pineapple juice mixture over quail. Bake, uncovered, for 20 minutes. Turn quail breast side up and arrange pineapple and lemon slices over quail. Baste with sauce and bake until quail are fork tender, 15 to 30 minutes longer. Arrange quail and pineapple slices on a platter. Salt and pepper sauce to taste and serve over quail. Allow 2 quail per person.

photo by Joel Arrington

Honey Almond Carrots

1 pound carrots, scraped and thinly sliced
1/4 cup toasted slivered almonds
2 tablespoons butter or margarine
1/2 teaspoon dry mustard
1/8 teaspoon ground nutmeg
2 tablespoons honey

Cook carrots in water over medium heat until tender. Drain; add remaining ingredients. Heat through. Makes 4 to 6 servings.

Tomato Aspic Salad

1 package (6 ounces) lemon-flavored gelatin
2 1/2 cups boiling water
1 can (15 ounces) seasoned tomato sauce
2 tablespoons vinegar
1/8 teaspoon salt

Dissolve gelatin in boiling water. Add tomato sauce, vinegar and salt. Pour into a 6-cup mold or individual molds and chill until firm. Unmold on crisp greens. Makes 8 servings.

Spoon Bread

2 cups milk
1 cup white corn meal
2 tablespoons melted butter
3 egg yolks, thoroughly beaten
1 teaspoon baking powder
1/2 teaspoon salt
3 egg whites, stiffly beaten

Preheat oven to 350 degrees. Into 2 cups boiling milk, stir 1 cup corn meal. Place over slow, direct heat and stir gently until milk and corn meal are blended and thick. Add melted buter and let mixture cool. Do *not* chill. Add beaten egg yolks, baking powder and salt. When ready to bake, fold in stiffly beaten egg whites. Pour into a well-greased 1½-quart baking dish and bake for 45 minutes. Makes 4 to 6 servings.

No-Bake Pumpkin Pie

1 envelope unflavored gelatin
1 teaspoon cinnamon
1/2 teaspoon ginger
1/2 teaspoon nutmeg
1/4 teaspoon salt
1 can (14 ounces) sweetened condensed milk
2 eggs, well beaten
1 can (16 ounces) pumpkin
1 graham cracker Ready-Crust pie crust

In a heavy medium saucepan, combine unflavored gelatin, cinnamon, ginger, nutmeg and salt. Stir in sweetened condensed milk and eggs. Mix well. Let stand 1 minute. Over low heat, cook and stir constantly until gelatin dissolves and mixture thickens slightly, about 10 minutes. Remove from heat. Stir in pumpkin; mix well. Pour into prepared crust. Chill 3 hours or until set. Garnish as desired. Makes 6 to 8 servings. □

Habitat

Edges and Layering

by Nancy Hugo

One of the best ways to improve habitat for wildlife is to increase the amount of "edge" in the yard. In biological terms, an edge is the place where two habitats or plant communities meet. These areas are particularly valuable to wildlife because they offer a greater biotic diversity than either of the neighboring ecosystems alone.

Research has shown, for example, that wild birds are more abundant—both in terms of absolute numbers and in terms of number of species—at the woodland edge than in the woodland. That's because these edge areas offer not only a wider variety of food (each area supports different kinds of invertebrates, insects, and plants) but more places to hide and nest. A bird can benefit from what each area provides when he lives where a meadow is backed by a shrubby area which is in turn backed by a woodland. The grassy area offers food and nesting material, the shrubs offer nesting spots and cover, the woodland offers high song perches.

What this means to those of us planning home landscapes is that we need to think in terms of both horizontal and vertical edges. We can increase the amount of horizontal edge in the yard by creating borders in and around our yards. There is an edge effect, for example, between a perennial border and lawn and between areas planted in groundcover and lawn. Just designing these areas with curved edges instead of straight lines increases the amount of edge they provide. "Think crooked," advises one landscape architect alert to the wildlife value of his designs.

It may also be a good idea to rethink the amount of grass you want to grow. If more than half of your yard is planted in grass, you're probably not optimizing its wildlife value. By creating island beds planted with native shrubs and ground covers within the lawn, you can increase edge and improve your yard's attractiveness to wildlife.

Edges and layering effect; photo by Pels.

To increase the amount of vertical edge in the yard, think in terms of mixed height plantings. Plantings that get progressively taller as they recede from open areas provide this vertical edge. What you want are multi-layered plantings—perennials in front of shrubs in front of small trees, for example. What you want to avoid are large expanses of uniform habitats, whether they be trees, shrubs, or closely cropped grass.

As an ideal type, consider this property. There is lawn near the house. Not a lot of lawn but enough to offer a sunny opening for birds. All the better if the lawn's rich in clover for bees. If there are island beds in the yard, they are planted in groundcovers with wildlife value like bearberry or cotoneaster. In the center of the island beds are native shrubs like serviceberry, elderberry, or native viburnums. Beyond the lawn is an infrequently mown meadow, and beyond that are low shrubs like sumac, snowberry, and blackberry. Beyond the low shrubs are taller shrubs or small trees like tartarian honeysuckle, black cherry, mountain ash, or dogwood. Then come tall pine, spruces, cedars or deciduous hardwoods.

That may be more than the average backyard can accomodate, but you can increase the edge effect in any yard, no matter how small, just by letting the grass around the perimeter of the property grow a few inches taller than the closely cropped lawn. Let the crickets and grasshoppers who escape into the shelter of this taller grass remind you how important it is to give wildlife an edge. □

Safety

It's Layup Time

by William Antozzi, Boating Safety Officer

It's that time of year when many boaters think about putting their boats away for the winter. If proper steps are taken, springtime will find the winterized boats in good shape and ready to go. Too many boats are not properly winterized and the ruined engines are mute testimony.

Engines should be run long enough to thoroughly heat them so the engine oil is warm enough to flow easily. The oil should be drained and replaced so that the old oil with its accumulated acids will not damage the crankshaft and critical bearings. It is more convenient to change oil while the boat is still in the water because the engine can be run, as long as necessary, without damage.

If boats have fuel, air, and oil filters, they should be replaced. A good time to replace the oil filters is after the old oil has been removed and before new oil has been added.

Stern drives and outboards should have lower unit oil drained and replaced because water can get in with the oil and cause damage. If the fuel tanks cannot be drained and flushed clean, they should be filled to the brim to prevent condensation and reduce oxidation. Air entering the fuel tanks cause oxidation, a process creating resin which can clog the fuel system. A little room should be left to add a gasoline stabilizer and conditioner.

Boats with liquid closed cooling systems do not use the water in which the boats are sitting to cool the engines. Closed systems are winterized the same as a car engine. Antifreeze should be tested with a hydrometer. This is a good time to check for leaks.

Engines which use the water upon which the vessel floats as the coolant need antifreeze pumped through the cooling systems. The antifreeze solution (usually half antifreeze and half water) should be put into a bucket. The water-intake hose should be disconnected and the water-end put into the bucket. A hose extension may be necessary to reach the bucket of antifreeze. If practical, the container should be at a higher level than the intake aperture. Then the engine should be run until the antifreeze runs out of the coolant discharge aperture. When the discharge is the coolant color, there will be enough in the system. Low points in the system which retain water will be protected from freezing. Care must be taken to insure that engines are thoroughly warmed so that thermostats are open, allowing the antifreeze to penetrate throughout all spaces.

Some water intakes on stern drives are a little different to get to. A simple solution is to purchase an inexpensive set of "earmuffs" which fit over the water intakes. A piece of garden hose from the bucket of antifreeze to the "earmuffs" will provide the antifreeze a route to the water intakes.

Some people merely drain their cooling systems. That method is fine provided all drain plugs are opened and all low areas properly drained. If one plug is missed, however, there could be trouble.

When I am satisfied that I have sufficient antifreeze in my vessel engines, I dump transmission oil into the carburetors of my running engines which causes them to immediately choke and stall. The resultant fogging of the engine interiors protects the pistons and valves against rust and corrosion and protects the carburetor interiors. I then put a piece of light flexible plastic over the carburetors and replace the backfire flame arrestors on top of the carburetors to hold the plastic in place. Outboards should have rust-inhibiting oil sprayed into their carburetor air intakes. The power head should be sprayed with an anti-corrosive. Outboards may remain mounted during storage. If boats are left in the water all winter, the outboard motors should be in the down or vertical position.

Vessels with drinking water systems need to have the water drained and replaced with potable antifreeze. Hot water tanks must also be drained and potable antifreeze added. Heads (toilets) which contain water must also be drained. Adding antifreeze will get to low places which hold water. All seacocks must be closed.

Batteries need attention. They must be kept charged. If fully charged, they will not freeze. It is best to bring batteries inside for the winter, and store them on wooden blocks.

Electrical connections should be cleaned with 400-grit sandpaper and sprayed with moisture displacing oil. The critical connections are those on the starter, solenoid, engine ground and alternator connections.

Electronic equipment such as radios, hailers and depth finders should be removed from the vessel and stored in a warm, dry place. All connections should be marked with tape or tags to facilitate reinstallation. Fiberglass surfaces may be waxed and metal fittings coated with petroleum jelly.

Environmental note: drained oil should be turned into certain service stations which accept it for recycling. □

This hunting season, let's make a pledge to ourselves:

to be honorable, to be safe, to be humble in the field . . . remembering always that this privilege of ours is an old and fragile one, to be handled gently and reverently—and to be shared.